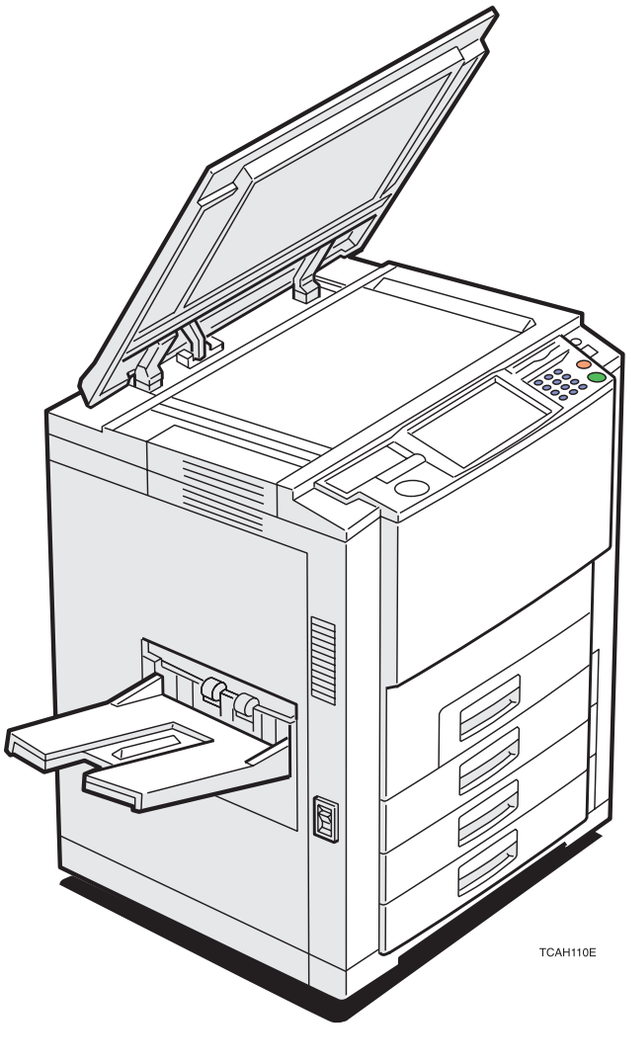
RICOH

Aficio Color™ 6010/6110

Operating Instructions



Read this manual carefully before you use this product and keep it handy for future reference.
For safety, please follow the instructions in this manual.

Introduction

This manual contains detailed instructions on the operation and maintenance of this machine. To get maximum versatility from this machine all operators should carefully read and follow the instructions in this manual. Please keep this manual in a handy place near the machine.

Please read the Safety Information before using this machine. It contains important information related to USER SAFETY and PREVENTING EQUIPMENT PROBLEMS.

Notes:

Some illustrations may be slightly different from your machine.

Certain options may not be available in some countries. For details, please contact your local dealer.

Operator Safety:

This machine is considered a CDRH class 1 laser device, safe for office/EDP use. The machine contains two 15-milliwat, 760-800 nanometer wavelength, GaAIAs laser diodes. Direct (or indirect reflected) eye contact with the laser beam might cause serious eye damage. Safety precautions and interlock mechanisms have been designed to prevent any possible laser beam exposure to the operator.

Laser Safety:

The Center for Devices and Radiological Health (CDRH) prohibits the repair of laser-based optical unit in the field. The optical housing unit can only be repaired in a factory or at a location with the requisite equipment. The laser subsystem is replaceable in the field by a qualified Customer Engineer. The laser chassis is not repairable in the field. Customer engineers are therefore directed to return all chassis and laser subsystems to the factory or service depot when replacement of the optical subsystem is required.

Warning:

Use of controls or adjustment or performance of procedures other than those specified in this manual might result in hazardous radiation exposure.

Notes:

The model names of the machines do not appear in the following pages. Check the type of your machine before reading this manual.

Basic type : Aficio Color 6010

Edit type : Aficio Color 6110

Certain types might not be available in some countries. For details, please contact your local dealer.

Two kinds of size notation are employed in this manual. With this machine refer to the inch version.

For good copy quality, Ricoh recommends that you use genuine Ricoh toner.

Ricoh shall not be responsible for any damage or expense that might result from the use of parts other than genuine Ricoh parts in your Ricoh office product.

Power Source

120V, 60Hz, 16A

Please be sure to connect the power cord to a power source as above. For details about power source, ☛ see page 202.

Do not make copies of anything which is prohibited from copying by law. The following items are normally prohibited from copying by national law. Other items may be prohibited by local law.

- **Money**
- **Stamps**
- **Bonds**
- **Stocks**
- **Bank drafts**
- **Checks**
- **Passports**
- **Driver's licenses**

The copy samples in this Operating Instructions differ somewhat from actual copies due to printing effects.

The coloring of each Color key may differ somewhat from the actual copies.

This copier has a function that prevents making counterfeit bills. So, if you use an original image that is similar to a bill, you may not get proper copies.

Safety Information

When using your machine, the following safety precautions should always be followed.

Safety during Operation

In this manual, the following important symbols are used:

⚠***WARNING:***	***Ignoring this warning could cause serious injury or even death.***
⚠***CAUTION:***	***Ignoring this caution could cause injury or damage to property.***

Examples of Indications



Symbols ⚠ mean a situation that requires you take care.



Symbols ⚠ mean "Hot surface".



Do NOT carry out the operation represented by this symbol ⃠.
This example means "Do not take apart".



Symbols ● mean you MUST perform this operation.
This example means "You must remove the wall plug".

⚠*WARNING:*



- *Only connect the machine to the power source described on the inside front cover of this manual.*
- *Avoid multi-wiring.*
- *Do not damage, break or make any modifications to the power cord. Do not place heavy objects on it, pull it hard or bend it more than necessary. These actions could cause an electric shock or fire.*
- *Do not plug or unplug the power cord with your hands wet. Otherwise, an electric shock might occur.*



- *Make sure the wall outlet is near the machine and freely accessible so that in event of an emergency it can be unplugged easily.*



- *Do not remove any covers or screws other than those specified in this manual. Some parts of the machine are at a high voltage and could give you an electric shock. Also, if the machine has laser systems, direct (or indirect) reflected eye contact with the laser beam may cause serious eye damage. When the machine needs to be checked, adjusted, or repaired, contact your service representative.*
- *Do not take apart or attempt any modifications to this machine. There is a risk of fire, electric shock, explosion or loss of sight. If the machine has laser systems, there is a risk of serious eye damage.*



- *If the machine looks damaged or breaks down, smoke is coming out, there is a strange smell or anything looks unusual, immediately turn off the operation and main power switches then unplug the power cord from the wall. Do not continue using the machine in this condition. Contact your service representative.*
- *If metal, liquid or foreign matter falls into the machine, turn off the operation and main power switches, and unplug the main power cord. Contact your service representative. Do not keep using the machine with a fault or defect.*



- *Do not put any metal objects or containers holding water (e.g. vases, flowerpots, glasses) on the machine. If the contents fall inside the machine, a fire or electric shock could occur.*



- *Do not incinerate used toner or toner containers. Toner dust might ignite when exposed to an open flame. Dispose of the used toner containers according to local regulations for plastics.*



- *Do not insert your hands between sorter bins when your machine is equipped with the 20-bin sorter stapler. You may be injured.*

.

⚠CAUTION:



- *Keep the machine away from humidity and dust. A fire or an electric shock might occur.*
- *Do not place the machine on an unstable or tilted surface. If it topples over, it could cause injury.*



- *After you move the machine, fix it with the caster fixture. Otherwise, the machine might move or come down to cause a personal injury.*



- *When you move the machine, unplug the power cord from the wall outlet to avoid fire or electric shock.*
- *When the machine will not be used for a long time, unplug the power cord.*



- *When you pull out the plug from the socket, grip the plug to avoid damaging the cord and causing fire or electric shock.*



- *If you use the machine in a confined space, make sure there is a continuous air turnover.*



- *Do not reuse stapled paper. Do not use aluminum foil, carbon-containing paper or other conductive paper. Otherwise, a fire might occur.*



- *When removing misfed paper, do not touch the fusing section because it could be very hot.*



- *This machine has been tested for safety using this supplier's parts and consumables. We recommend you only use these specified supplies.*



- *Do not eat or swallow toner.*
- *Keep toner (used or unused) and toner containers out of reach of children.*



- *This equipment is only to be installed by a qualified service personnel.*



- *Deliver to collection point for waste products. Do not be disposed of via domestic refuse collection.*

How to Read this Manual

Symbols

In this manual, the following symbols are used:

⚠ ***WARNING:***

This symbol indicates a potentially hazardous situation that might result in death or serious injury when you misuse the machine without following the instructions under this symbol. Be sure to read the instructions, all of which are described in the Safety Information section.

⚠ ***CAUTION:***

This symbol indicates a potentially hazardous situation that might result in minor or moderate injury or property damage that does not involve personal injury when you misuse the machine without following the instructions under this symbol. Be sure to read the instructions, all of which are described in the Safety Information section.

*The statements above are notes for your safety.

Important

If this instruction is not followed, paper might be misfed, originals might be damaged, or data might be lost. Be sure to read this.

Preparation

This symbol indicates the prior knowledge or preparations required before operating.

Note

This symbol indicates precautions for operation, or actions to take after misoperation.

Limitation

This symbol indicates numerical limits, functions that cannot be used together, or conditions in which a particular function cannot be used.

Reference

This symbol indicates a reference.

[ ]

Keys that appear on the machine's panel display.

[ ]

Keys built into the machine's operation panel.

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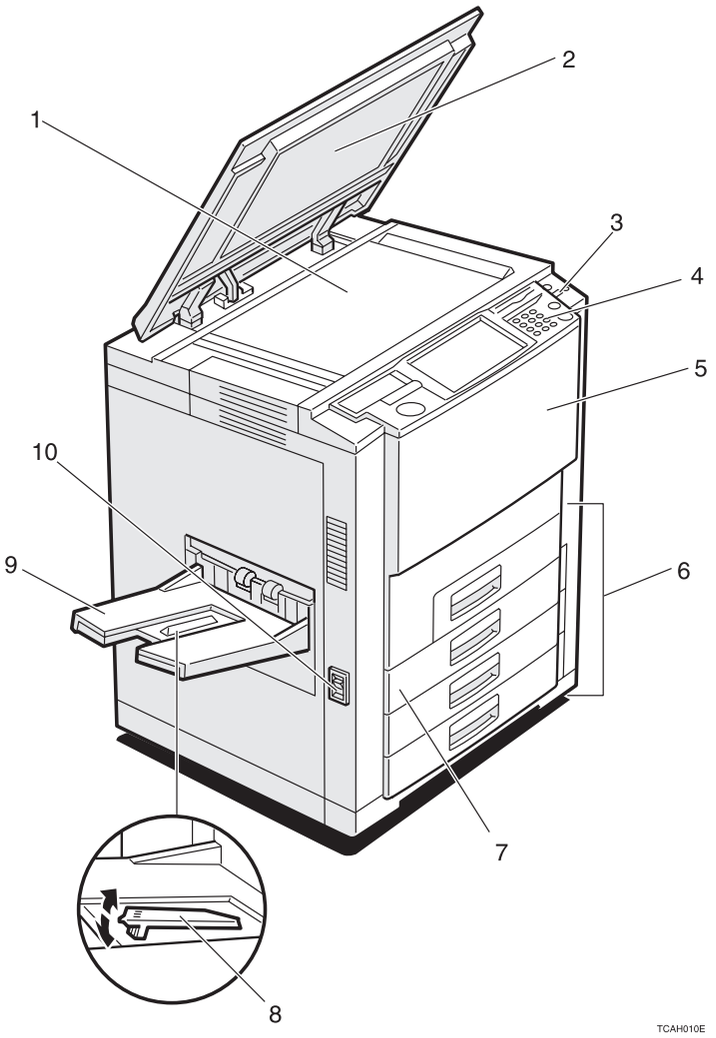
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Where it is &
What it is

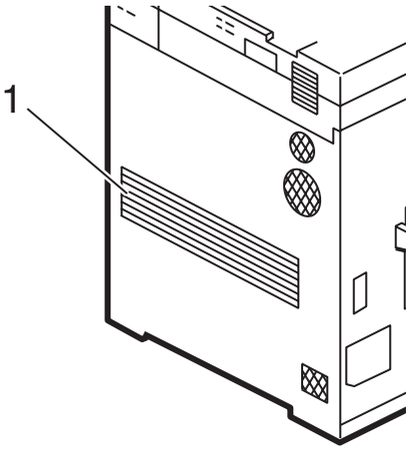
Machine Exterior



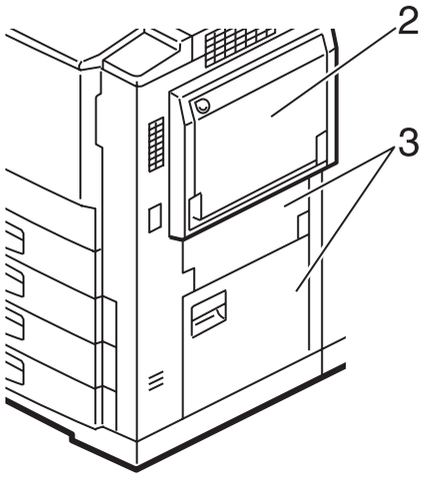
1. Exposure glass (platen glass)	Position originals here face down for copying.
2. Platen cover (option)	Lower this cover over originals placed on the exposure glass (platen glass) for copying.
3. Operation switch	Press this switch to turn the power (on the **On** indicator lights up). To turn off the power off, press this switch again (the **On** indicator goes off).
4. Operation panel	☛ See page 5.
5. Front cover	Open to access the inside of the machine.
6. Paper tray	Set paper here. ☛ See page 172.
7. Auto duplex tray	Use to make two-sided copies.
8. Stopper	When you copy onto thin paper, raise this to prevent curling.
9. Copy tray	Completed copies are delivered here.
10. Main power switch	To start the machine, turn on this switch.

Note

❒ If the machine does not operate after turning on the operation switch, check if the main power switch is turned on. If it is off, turn it on.



TCAH020E



TCAH030E

1. Ventilation hole

Prevents overheating. Do not obstruct the ventilation hole by placing or leaning an object near it. If the machine overheats, a fault might occur.

2. Bypass tray

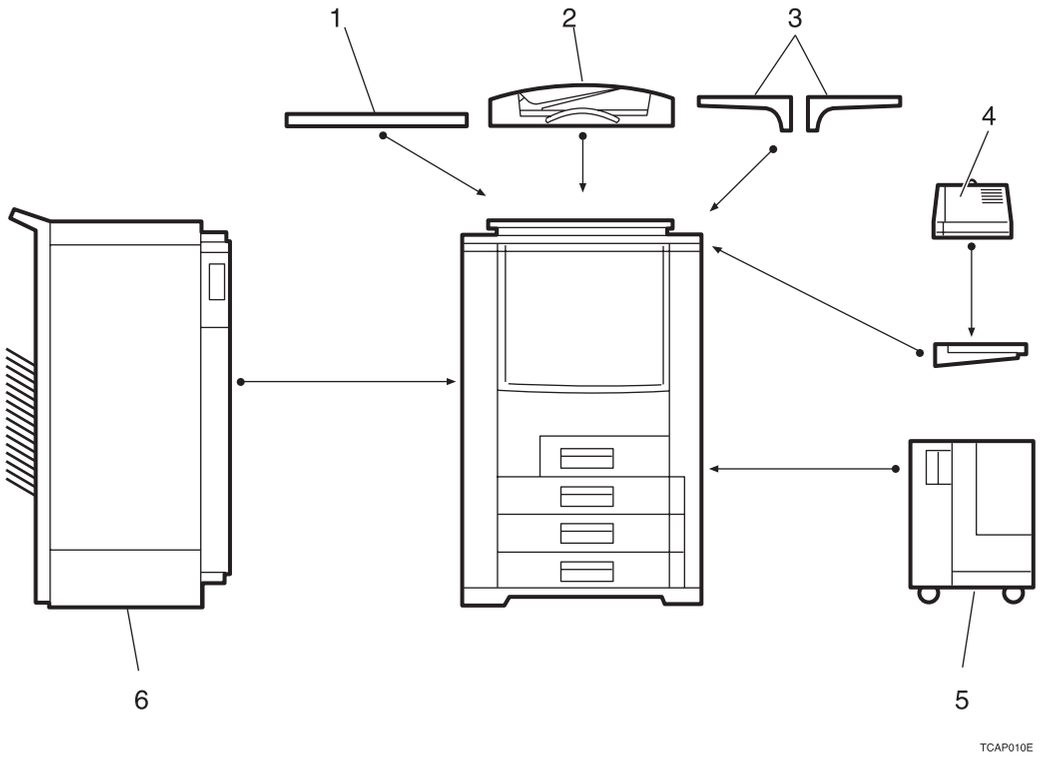
Use to copy onto OHP transparencies, adhesive labels, translucent paper, post cards, and non-standard size paper, ☛ See page 48.

3. Right side cover /Lower right cover

Open this cover to remove jammed paper.

Options

This machine can be provided with the following options:



1. Platen cover
Lower this cover over originals placed on the exposure glass (platen glass) for copying.

2. Document feeder (ADF)
Insert a stack of originals here. They will be fed automatically.

3. Original tray
Put your originals.

4. Film projector unit
Use to copy films. ☛ See page 207.

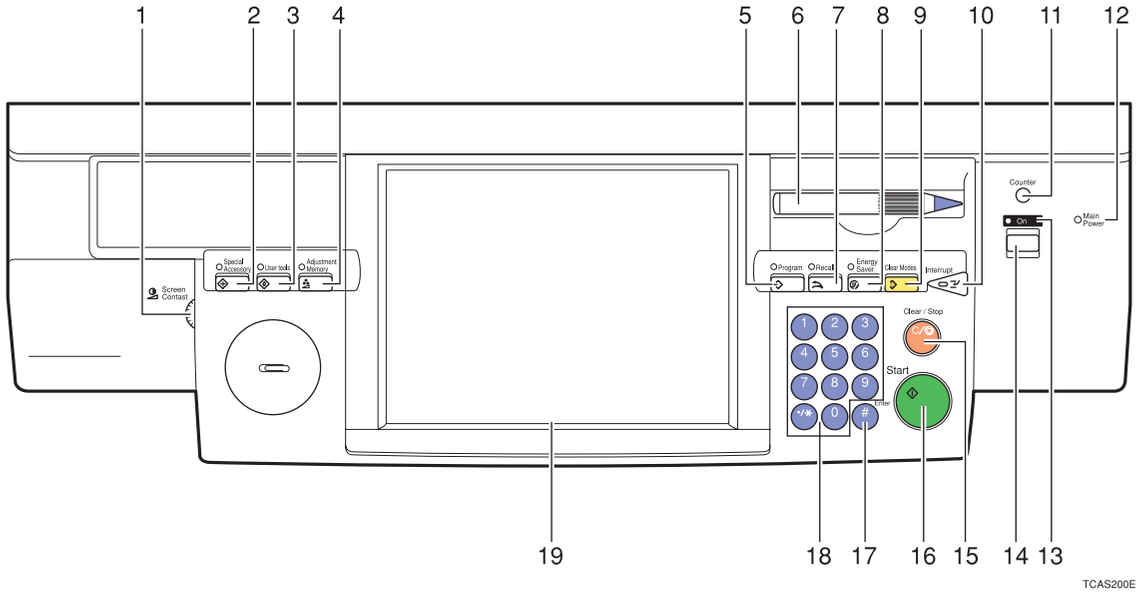
Note
❒ The holder is required for installation.

5. Large capacity tray (LCT)
Holds 1,500 sheets of paper.

Note
❒ The adapter is required for installation.

6. 20-bin sorter stapler
Sorts, stacks, and staples copies.

Operation Panel



1. **Screen Contrast knob**

   You can change the brightness of the display.

2. **[Special Accessory] key**

   Press to use the optional film projector unit.
   ☛See page 207.

3. **[User Tools] key**

   Press to change the default setting.
   ☛ See page 187.

4. **[Adjustment/Memory] key**

   Press to adjust the image or color balance, or to make user colors. ☛ See page 123.

5. **[Program] key**

   Press to select the program mode.
   ☛ See page 57.

6. **Editor pen**

   Use to designate areas.

7. **[Recall] key**

   Press to recall the previously selected copy jobs.

8. **[Energy Saver] key**

   Press to enter/exit the Energy Saver mode.
   ☛See page 55.

9. **[Clear Modes] key**

   Press to clear the previously entered settings.

10. **[Interrupt] key**

    Press to make interrupt copies.
    ☛ See page 55.

11. **[Counter] key**

    Press to display the total number of copies made.

12. **Main Power indicator**

    This indicator lights up when the main power switch is turned on, and goes off when the switch is turned off.

13. **On indicator**

    This indicator lights up when the operation switch is turned on, and goes off when the switch is turned off.

14. **Operation switch**

    Press this switch to turn the power on (the **On** indicator lights up). To turn the power off, press this switch again (the **On** indicator goes off).

15. **[Clear/Stop] key**

    Press to cancel the copy number entered. While copying, press to stop copying. This key is also used to clear data.

16. **[Start] key**

    Press to start copying.

17. **[#] key**

    Press to enter data in selected modes.

18. **[Number] keys**

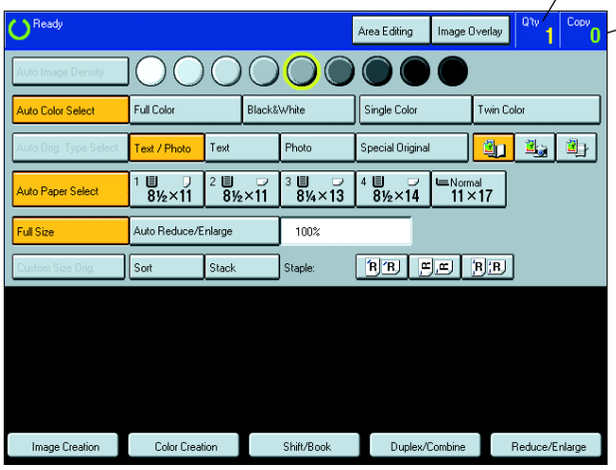
    Use to enter the desired number of copies. They are also used to enter data.

19. **Touch panel display**

    You can see the operation status and messages here.

Touch Panel Display

Initial display



COPY COUNTER
Counts number of copies made so far.

❒ You can select whether the copy counter counts up (counter up) or counts down (counter down). If you want to change the setting, ☛ see page 191.

This machine's features are accessed by simply pressing the name of the feature and following the instructions that come up on the display.

Reference

Regarding detailed information about each key and function, ☛ see page 12.

For how to use the touch panel display, ☛ see page 25.

What You can do with this Machine

Differences between Edit Type and Basic Type

This machine comes in two versions. Refer to the table below for features available on your machine.

Functions		Edit type	Basic type
Auto Image Density		✓	✓
Auto Color Select		✓	✓
Full Color		✓	✓
Black & White		✓	✓
Single Color		✓	✓
Twin Color		✓	✓
Auto Original Type Select		✓	✓
Auto Paper Select		✓	✓
Reduce/ Enlarge	Preset R/E	✓	✓
	Zoom	✓	✓
	Size Magnification	✓	✓
	Directional Magnification	✓	✓
	Poster Mode	✓	✓
Shift/Book	Shift	✓	✓
	Margin Adjustment	✓	✓
	Erase	✓	✓
	Cover Sheet	✓	✓
Color Creation	Color Conversion	✓	✓
	Color Erase	✓	✓
	Color Background	✓	✓
	Type Mask	✓	✓
Image Creation	Outline Image	✓	✓
	Positive/Negative	✓	✓
	Shadow Image	✓	✓
	Mirror Image	✓	✓
	Slanted Image	✓	✓
	Repeat Image	✓	✓
Color Adjustment/ Memory	Program User Color	✓	✓
	Color Adjustment	✓	✓
	Color Balance Adjustment	✓	✓
	Color Balance Sample	✓	✓
	Color Balance Program	✓	✓
	Image Adjustment	✓	✓
Image Overlay		✓	–
Area Editing		✓	–
Interrupt Copying		✓	✓

Functions	Edit type	Basic type
Recall	✓	✓
Auto Start	✓	✓
Program	✓	✓
Auto Reduce/Enlarge	✓	✓
Bypass Tray Copying	✓	✓
Duplex/Combine Copying	✓	✓
Default Setting	✓	✓
User Tools	✓	✓
Display Color	Full color	Full color

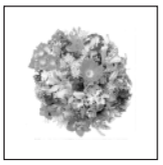
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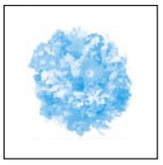
• Full Color Copy



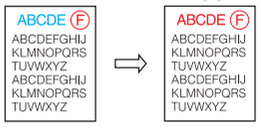
• Black & White Copy



• Single Color Copy



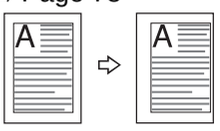
• Twin Color Copy



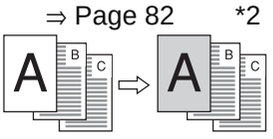
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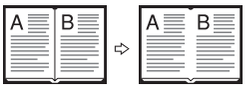
• Margin Adjustment ⇒ Page 78



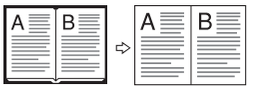
• Cover Sheet ⇒ Page 82 *2



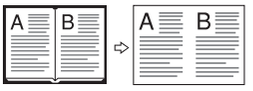
• Center Erase ⇒ Page 81



• Border Erase ⇒ Page 81



• Center/Border Erase ⇒ Page 81

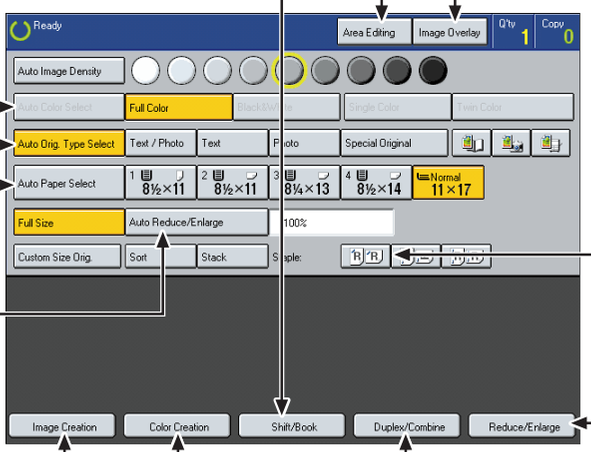


*1 Optional 20-bin sorter stapler required.
*2 Optional document feeder required.
*3 Only for Edit type.

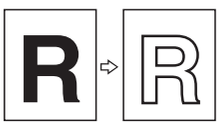
• Auto Original Type Select ⇒ Page 44

• Auto Paper Select ⇒ Page 47

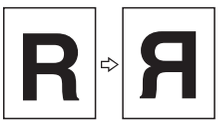
• Auto Reduce/Enlarge ⇒ Page 54



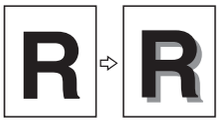
• Outline Image ⇒ Page 91



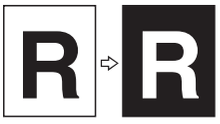
• Mirror Image ⇒ Page 96



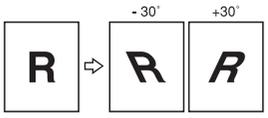
• Shadow Image ⇒ Page 92



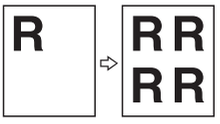
• Positive/Negative ⇒ Page 101



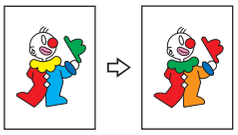
• Slanted Image ⇒ Page 95



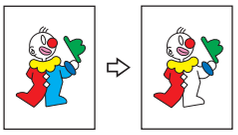
• Repeat Image ⇒ Page 97



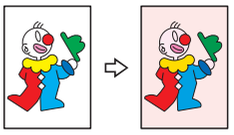
• Color Conversion ⇒ Page 85



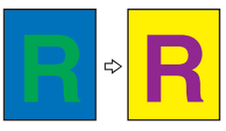
• Color Erase ⇒ Page 87



• Color Background ⇒ Page 88



• Type Mask ⇒ Page 89



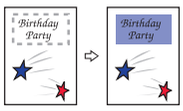
TCAX320N

• Area Editing ⇒ Page 139

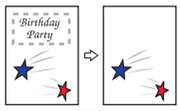
• Color Conversion ⇒ Page 152 *3



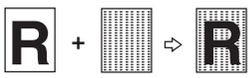
• Color Background ⇒ Page 152 *3



• Delete Area ⇒ Page 153 *3



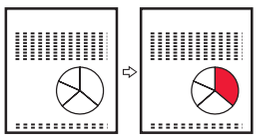
• Full Image Overlay ⇒ Page 111 *3



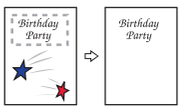
• Color Erase ⇒ Page 152 *3



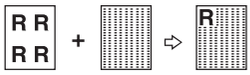
• Paint ⇒ Page 152 *3



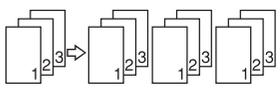
• Save Area ⇒ Page 154 *3



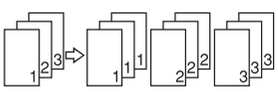
• Area Image Overlay ⇒ Page 115 *3



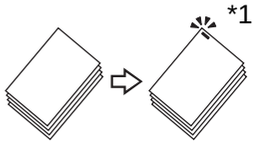
• Sort ⇒ Page 102 *1



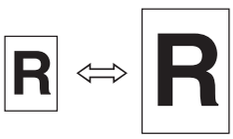
• Stack ⇒ Page 103 *1



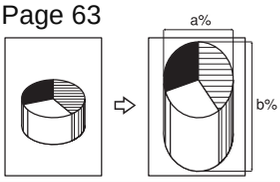
• Staple ⇒ Page 104 *1



• Preset R/E ⇒ Page 59



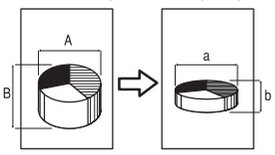
• Directional Magnification (%) ⇒ Page 63



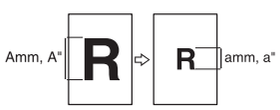
• Zoom ⇒ Page 60



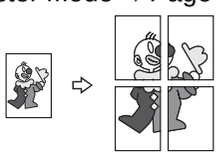
• Directional Size Magnification (inch) ⇒ Page 64



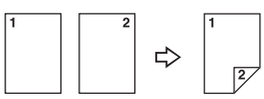
• Size Magnification ⇒ Page 62



• Poster Mode ⇒ Page 65



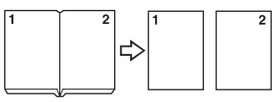
• 1 Sided → 2 Sided ⇒ Page 68



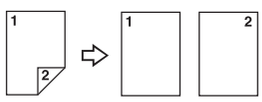
• 2 Sided → 2 Sided ⇒ Page 70



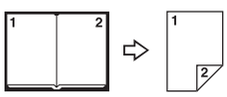
• Book → 1 Sided ⇒ Page 73



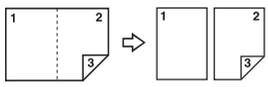
• 2 Sided → 1 Sided ⇒ Page 74



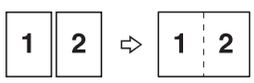
• Book → 2 Sided ⇒ Page 71



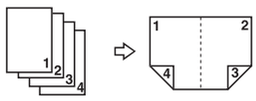
• Multi → 2 Sided ⇒ Page 72



• Combine 2 Originals ⇒ Page 75 *2

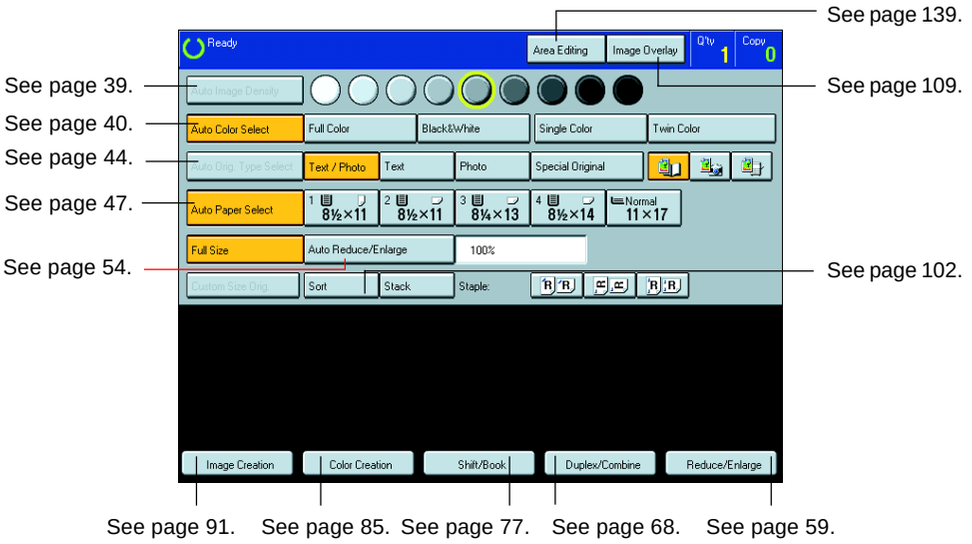


• Combine 4 Originals ⇒ Page 76 *2



TCAX330E

Function Summary



Selecting the Color

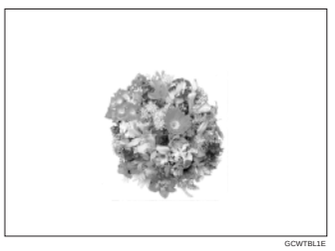
☛ See page 40.

Full color



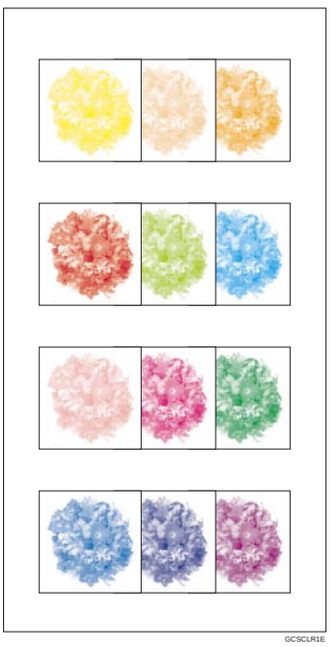
GCFCLR1E

Black & White



GCWTBL1E

Single color



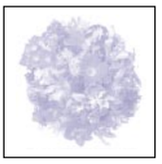
GCSCLR1E

User color



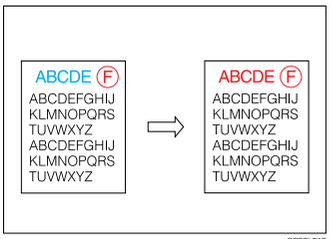
GCUSCL1E

Scanned color



GCSNCL1E

Twin color

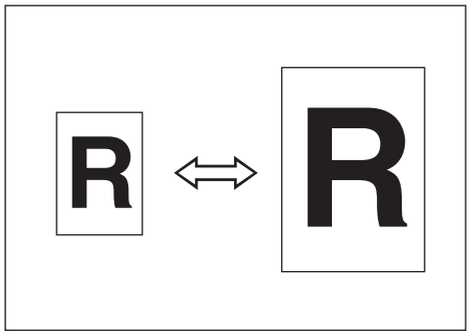


GCTCLR1E

Reducing and Enlarging

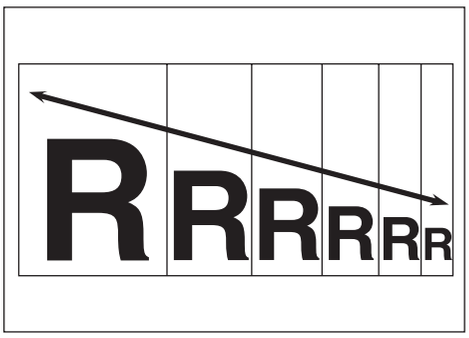
☛ See page 59.

Preset R/E—Reducing and enlarging using preset ratios



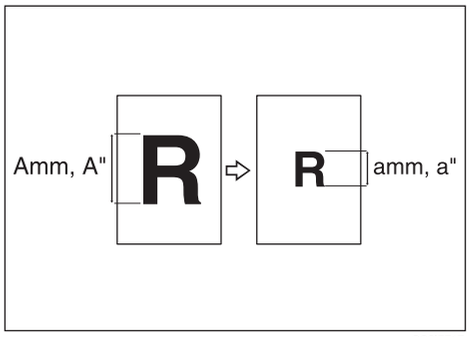
GCTHEN1E

Zoom—Reducing and enlarging in 1% steps



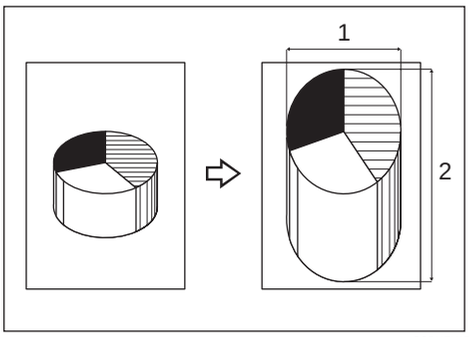
GCZOOM1E

Size Magnification(inch)—Fitting the original to a copy of a different size



GCSIZE1E

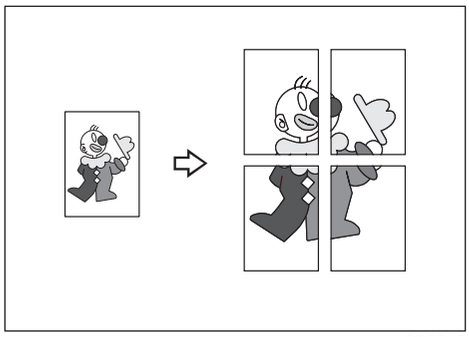
Directional Magnification (%)—Stretching and squeezing the image in 1% steps



GCDHEN1E

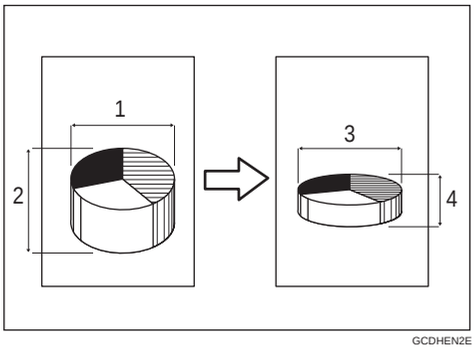
1: Horizontal %
2: Vertical %

Poster Mode—Enlarging the complete image onto several sheets



GCKREN1E

Directional Size Magnification (inch)—Stretching and squeezing the image into the copy area



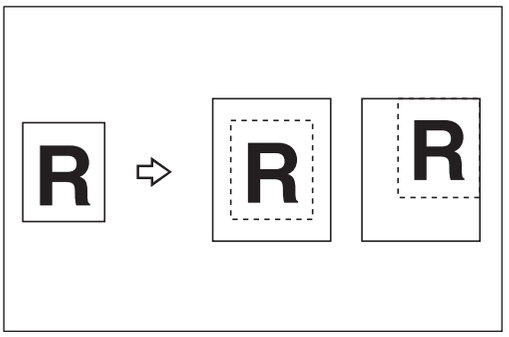
GCDHEN2E

1: Horizontal original size
2: Vertical original size
3: Horizontal copy size
4: Vertical copy size

Shifting the Image

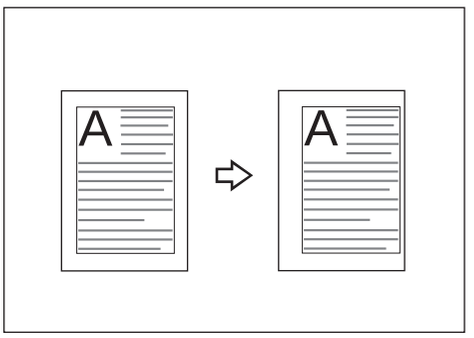
☛ See page 77.

Shift—Centering/Cornering the Image



GCIDOH3E

Margin Adjustment —Adding margins for binding

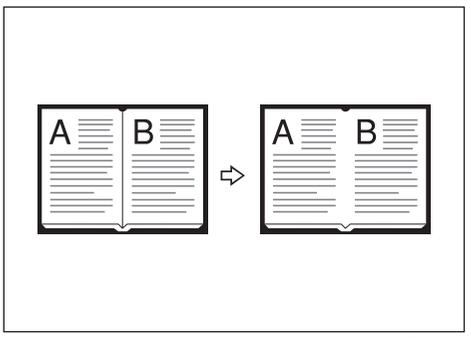


GCTOJS1E

Erasing Parts of the Copy Image

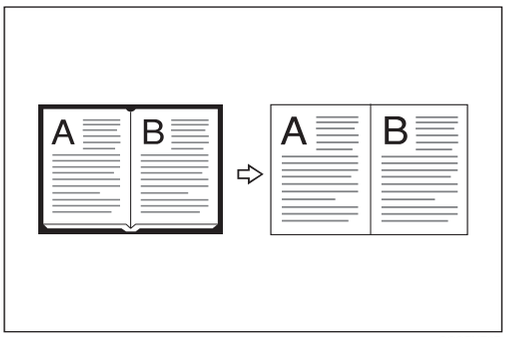
☛ See page 81.

Center Erase—Erasing the center margin of the original image



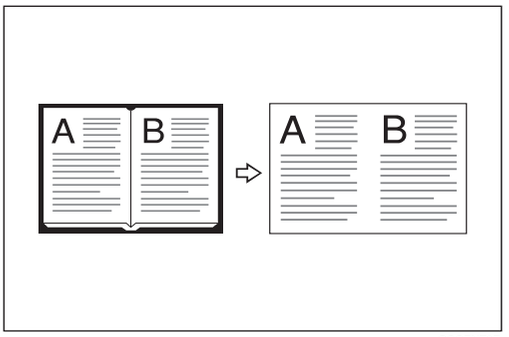
GCCENT1E

Border Erase—Erasing the surrounding area of the original image



GCCENT2E

Center/Border Erase—Erasing the center margin and surrounding area of the original image

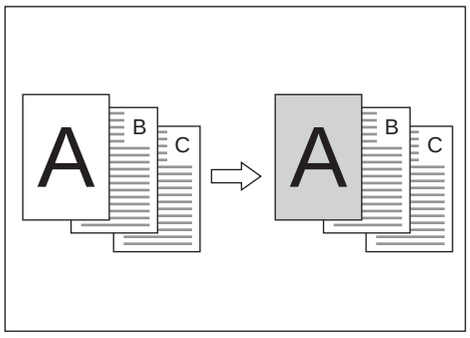


GCCENT3E

Adding the Cover

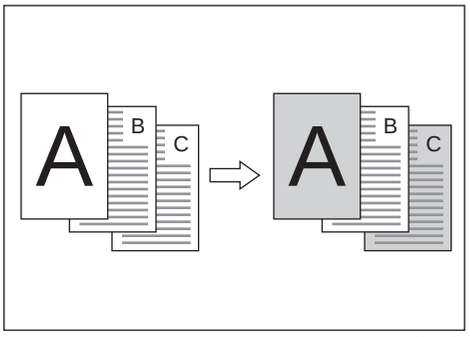
☛ See page 82.

Front Cover—Copying a front cover



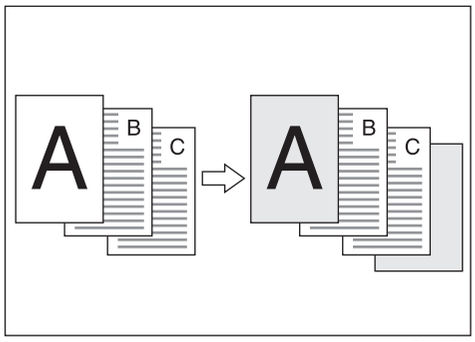
GCHYOS1E

Front & Back Cover—Copying front and back covers



GCHYOS3E

Front & Back Cover—Copying front cover and adding back cover

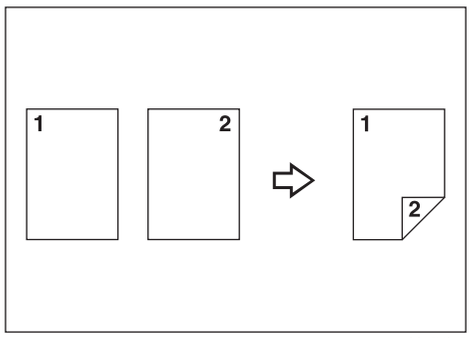


GCHYOS2E

Making Duplex Copies

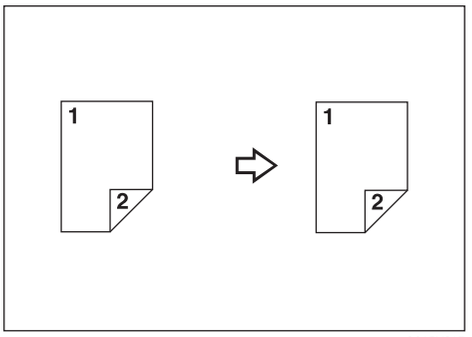
☛ See page 68.

1Sided → 2 Sided—Making two-sided copies from one-sided originals



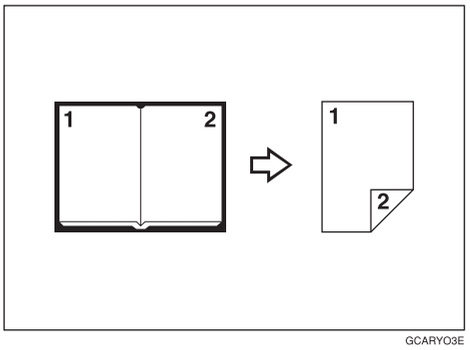
GCARYO1E

2 Sided → 2 Sided—Making two-sided copies from two-sided originals



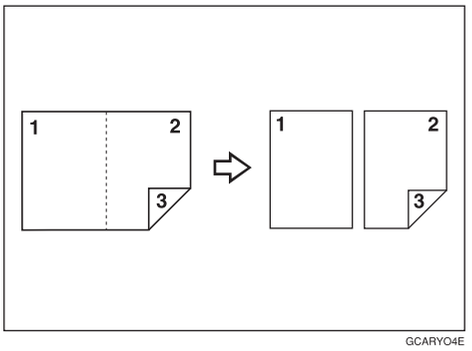
GCARYO2E

Book → 2 Sided—Making two-sided copies from facing pages of a bound original



GCARYO3E

Multi → 2 Sided—Making two-sided copies from a book

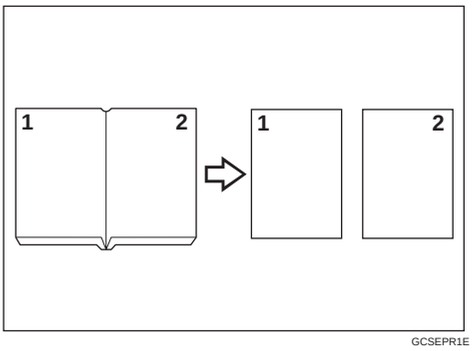


GCARYO4E

Making Series Copies

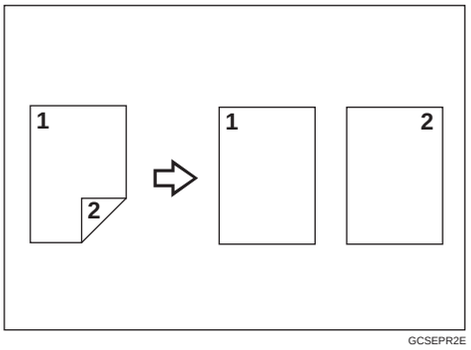
☛ See page 73.

Book → 1 Sided—From book originals to 2 one-sided copies



GCSEPR1E

2 Sided → 1 Sided—From two-sided originals to 2 one-sided copies

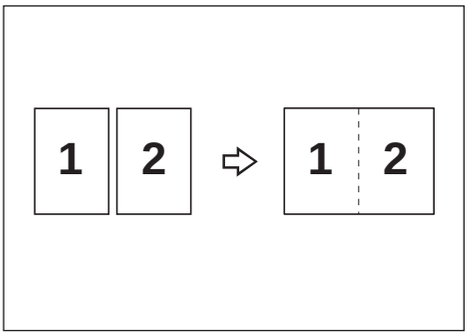


GCSEPR2E

Making Combine Copies

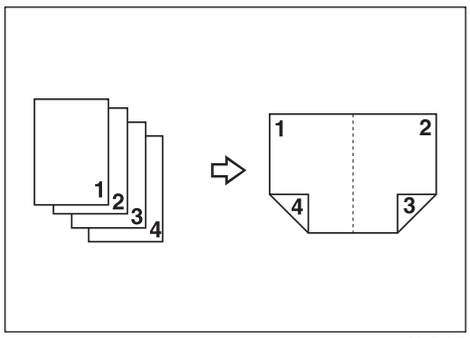
☛ See page 75.

Combine 2 Originals—Combining two originals



GCSYYK1E

Combine 4 Originals—Combining four originals

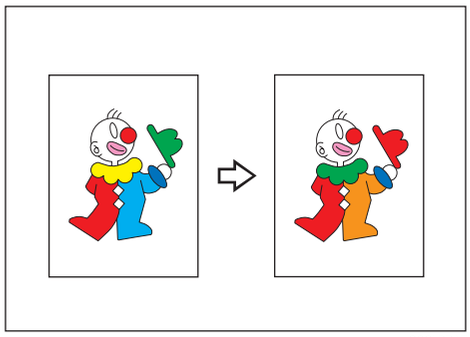


GCARYO5E

Color Creation

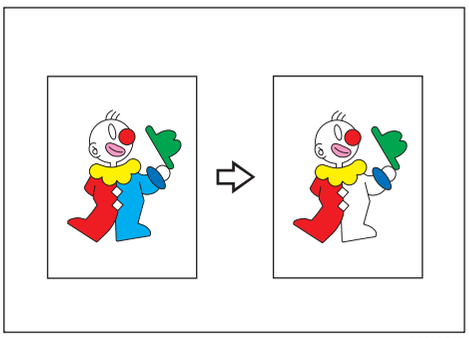
☛ See page 85.

Color Conversion—Converting a selected color into a different color



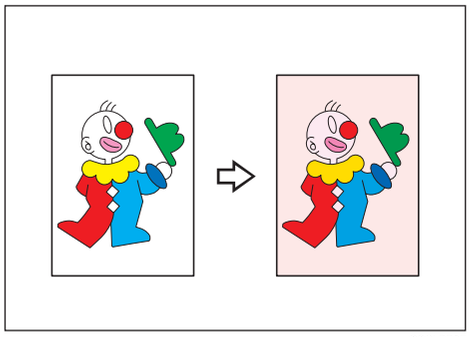
GCCLPRAE

Color Erase—Erasing the selected color



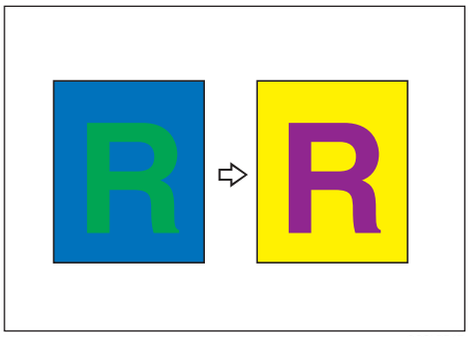
GCCLPR2E

Color Background—Making copies with a color background



GCCLPR3E

Type Mask—Coloring text part and background part separately

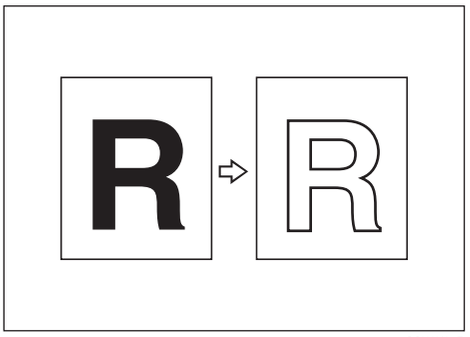


GCCLPR4E

Image Creation

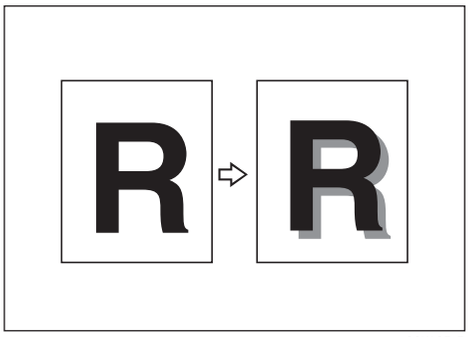
☛ See page 91.

Outline Image—Copying only the outline of the image



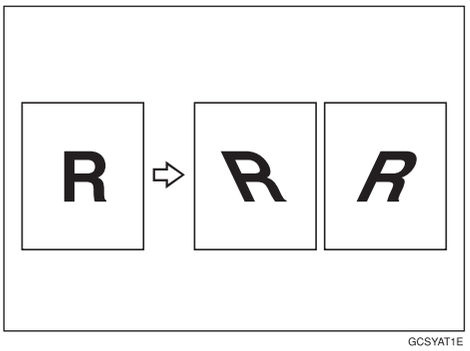
GCNAKA1E

Shadow Image—Adding a shadow around the copy image elements



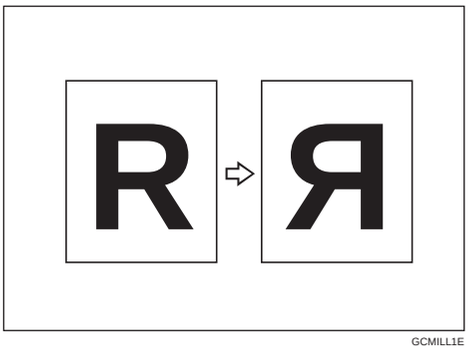
GCKAGE1E

Slanted Image—Slanting the copy image



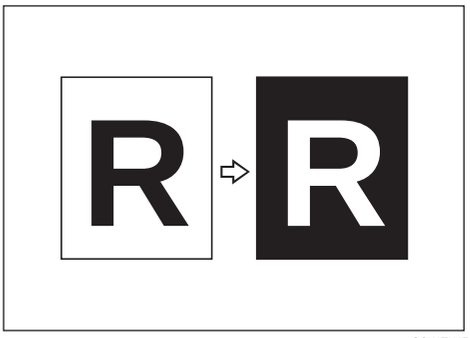
GCSYAT1E

Mirror Image—Making a mirror image



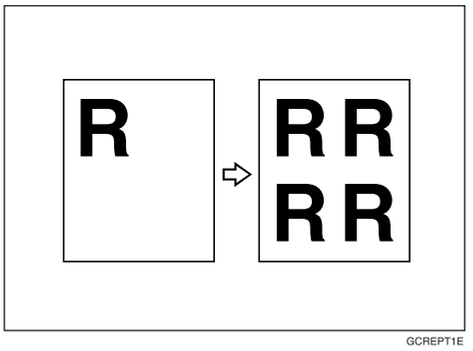
GCMILL1E

Positive/Negative—Copying in complementary colors



GCHATN1E

Repeat Image—Copying a part of the original image repeatedly

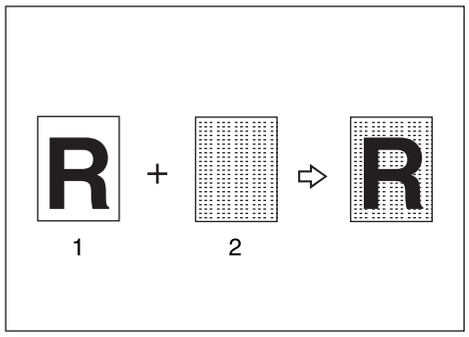


GCREPT1E

Image Overlay (Only for Edit Type)

☛ See page 109.

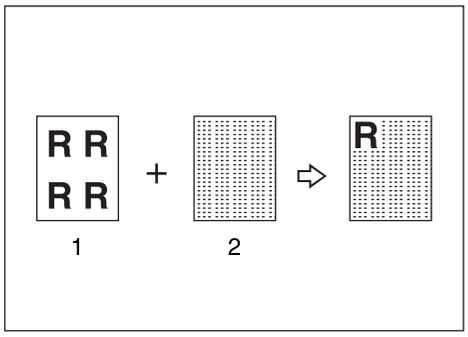
Full Image Overlay—Overlaying the overlay image onto a background



GCCOPM1E

1: Foreground image original
2: Background image original

Area Image Overlay—Overlaying a portion of the overlay image onto a background original



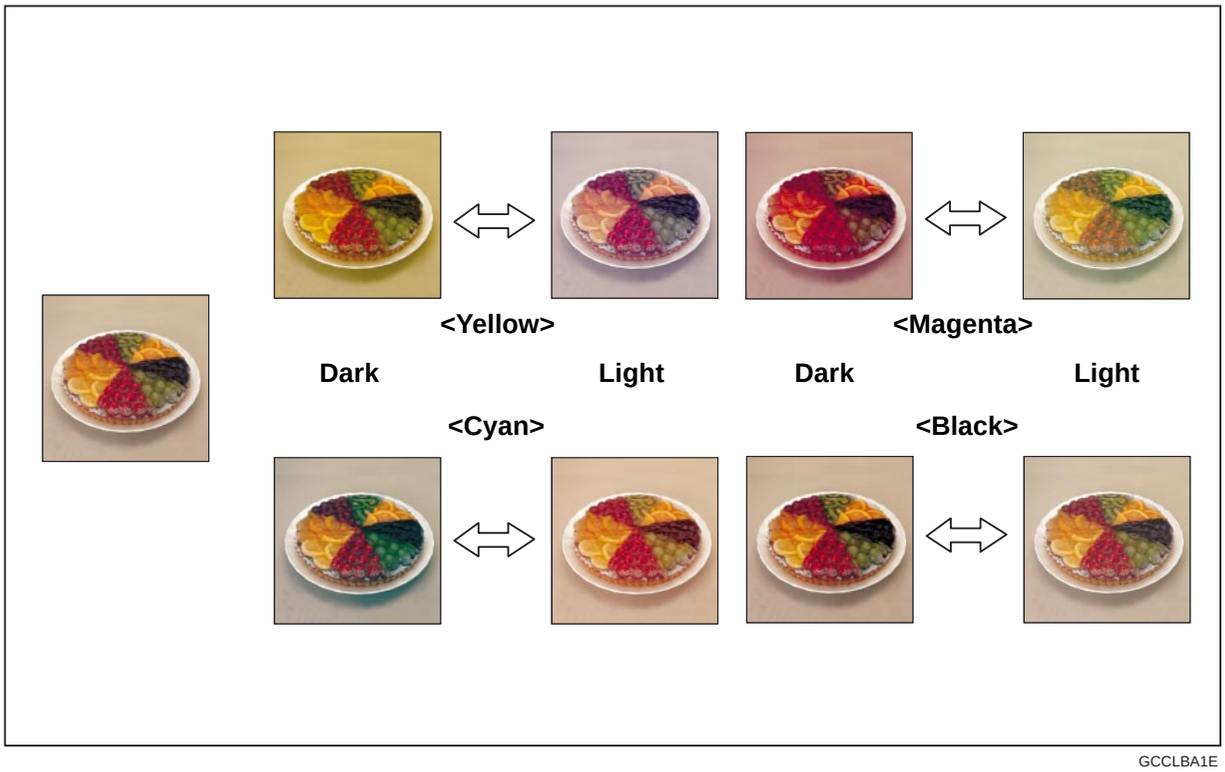
GCCOPMAE

1: Foreground image original
2: Background image original

Color Balance—Adjusting and Storing the Color Balance

☛ See page 124.

Color Balance Adjustment—Adjusting the color balance



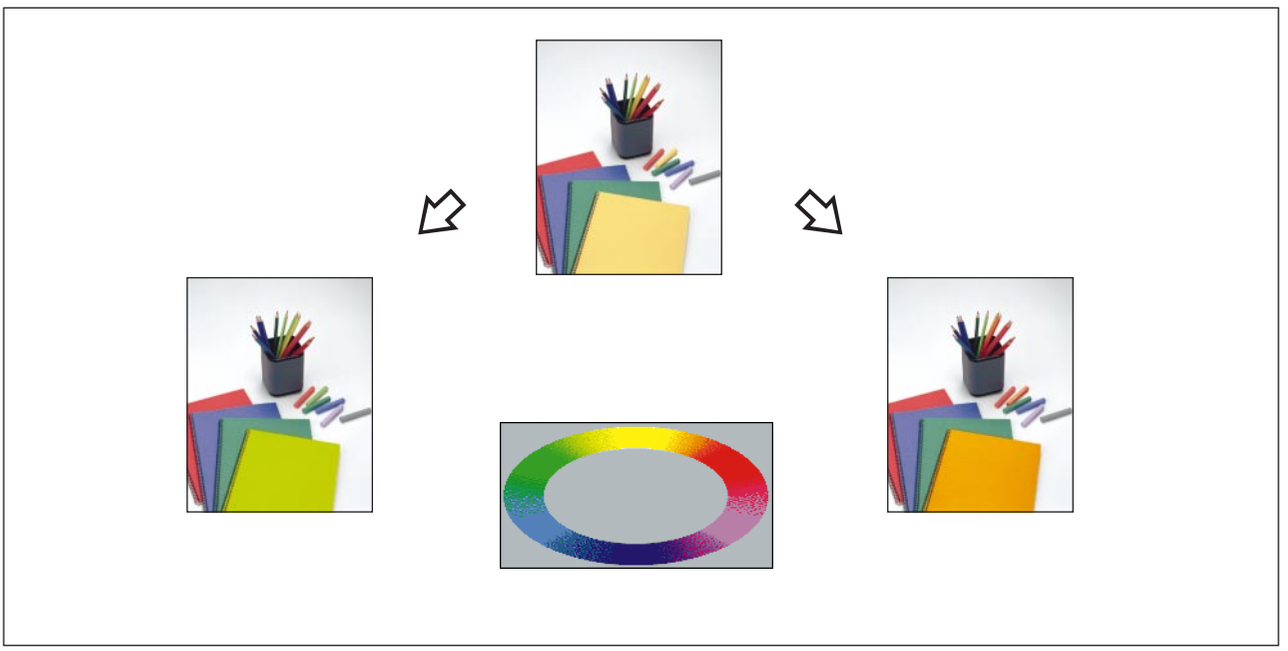
GCCLBA1E

Color Balance Program—Storing and recalling the color balance

Color Balance Sample—Sampling the color balance

Color Adjustment—Adjusting a Single Color

☛ See page 131.

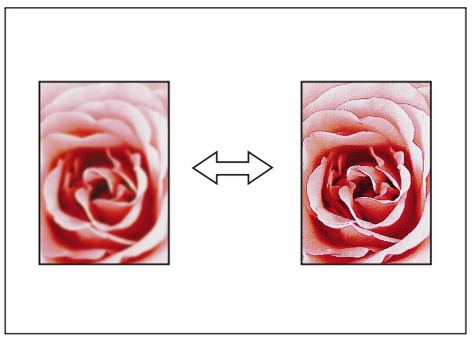


GCCLCY1E

Image Adjustment

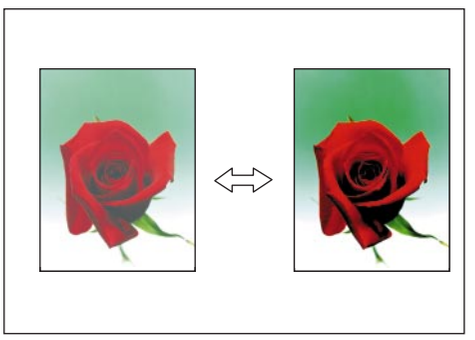
☛ See page 132.

Soft/Sharp



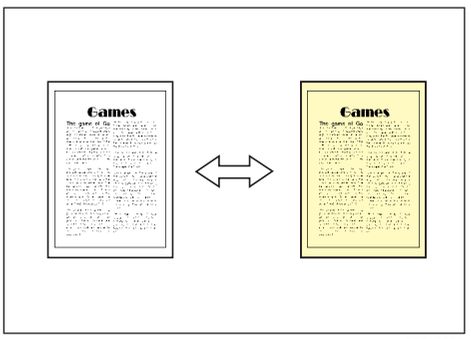
GCGAZO1E

Contrast



GCGAZO4E

Background Density



GCGAZO2E

Pastel



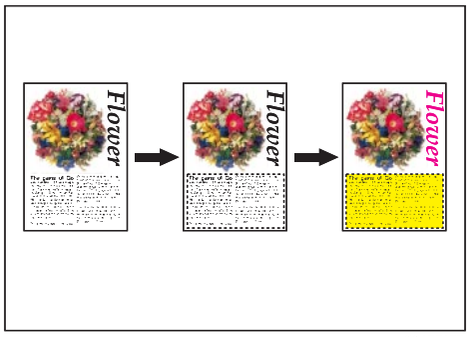
GCGAZO3E

Program User Color—Storing User Colors

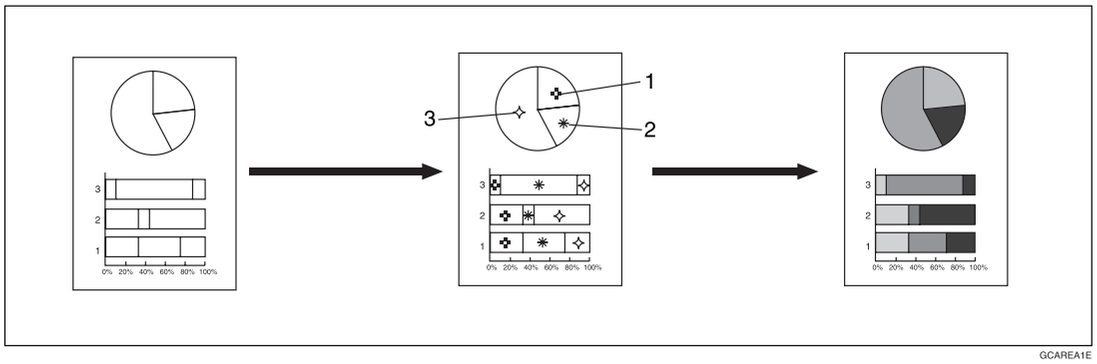
☛ See page 135.

Area Editing (Only for Edit Type)

☛ See page 139.



GCAREAEE

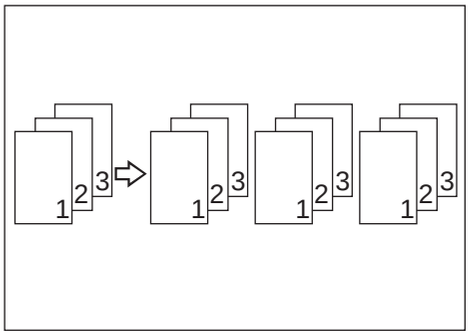


GCAREA1E

Finishing (Option)

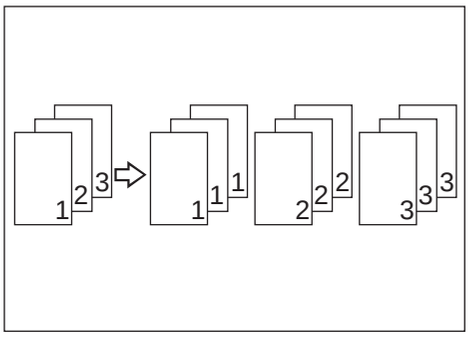
☞ See page 102.

Sort—Sorting into sets (123, 123, 123)



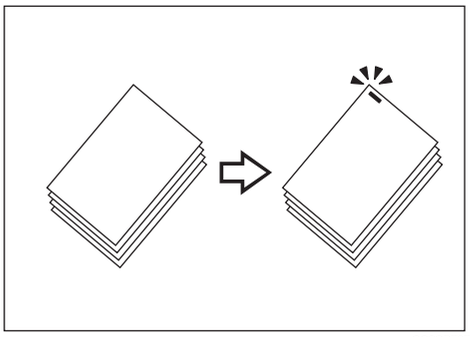
GCSORT1E

Stack—Stacking together all copies of a page (111, 222, 333)



GCSORT2E

Staple—Stapling copies



GCSORT3E

Using the Projector (Option)

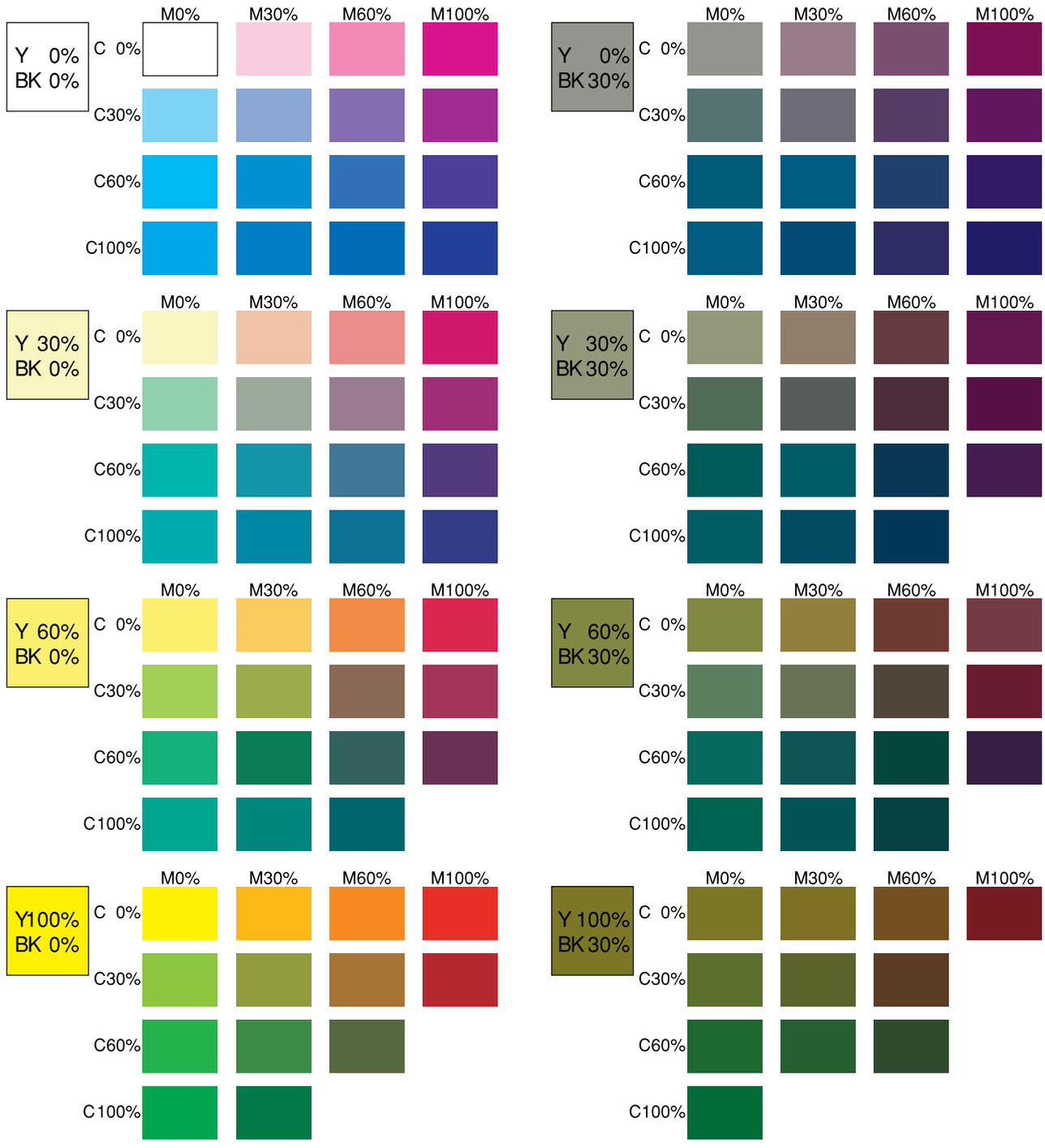
☞ See page 207.

Color Sample Chart

This is the User Color sample. You can mix the basic colors to make your own colors (User Color).

Note

❒ The color sample might differ somewhat from actual copies due to printing effects.

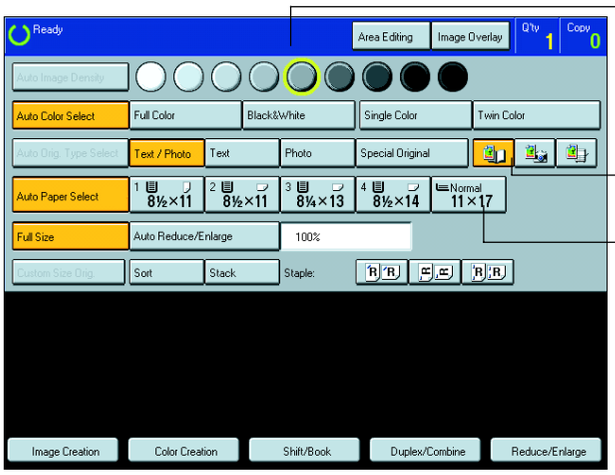


GCCLCT1J

Using the Touch Panel Display

Selecting Functions

On the touch panel display, you can find keys, instructions and messages. By pressing keys on the display, you can select or deselect functions, and enter data for the selected modes. If you make a mistake and wish to clear the current settings, press the **[Clear Modes]** key.



Messages and instructions appear here.

Keys that have been selected.

Keys that have the option of being selected.
Keys that do not have the option of being selected are fainter.

In this manual, keys on the display are indicated as follows:

Example:

Key on the display: 

In the manual: **[Auto Paper Select]** key

Note

❒ Do not press the touch panel display with any hard or sharp object. Always use the editor pen.

Entering Numbers

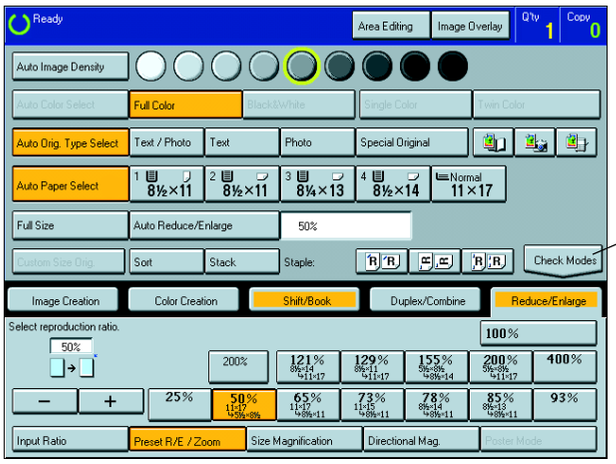
When the display prompts you to enter a number, type in the number with the **[Number]** keys and press the **[#]** key on the display to accept it.

Should you make a mistake:

- If you have not pressed the **[#]** key yet, press the **[Clear]** key and then re-enter it. If there is not the **[Clear]** key on the display, press the **[Clear/Stop]** key.
- If you have already pressed the **[#]** key, press the item you wish to change on the display and re-enter the number with the **[Number]** keys. Press the **[#]** key on the display to accept it.

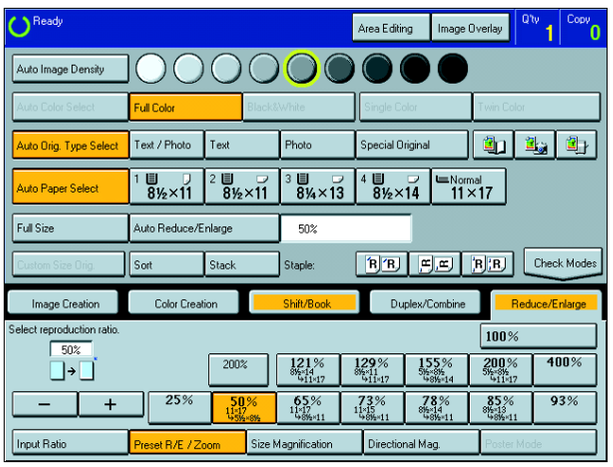
Checking the Functions You Have Selected

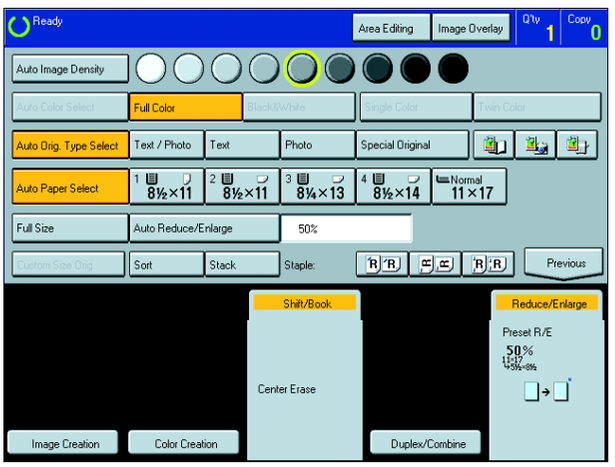
When you set one or more copy settings, the last item you selected will remain on the screen.



[Check Modes] key

To check all the settings you have set so far, press the **[Check Modes]** key.





Basics

Starting the Machine

To start the machine, press the operation switch to turn the power on.

Note

❒ This machine automatically enters Energy Saver mode or turns itself off if you do not use the machine for a while. About Energy Saver mode, ☛ see page 55. About Auto Timer, ☛ see page 191.

Power Switches

This machine has the operation switch and main power switch.

❒ **Operation switch (right side of the operation panel)**

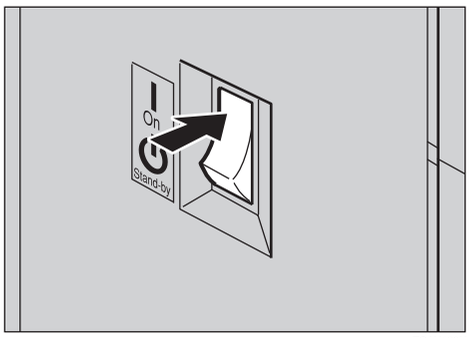
Press this switch to activate the machine. When the machine has warmed up, you can make copies.

❒ **Main power switch (left side of the machine)**

When the machine is not to be used for an extended period of time, turn off the main power switch.

Starting the Machine

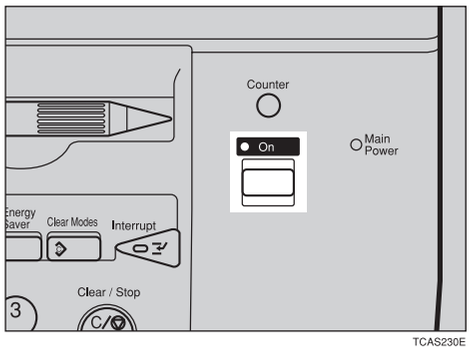
1. Make sure that the power cord is plugged into the wall outlet firmly.
2. Turn on the main power switch.



TCAH100N

Turning on the Power

1. Press the operation switch to make the **On** indicator lights up.



TCAS230E

Note

❒ If the power is not turned on when the operation switch is pressed, check if the main power switch is on. If off, turn it on.

❒ During the warm-up period (about 9 minutes), you can use the Auto Start function. ☛ See page 56.

When the machine is set for user codes

1. Enter your user code using the **【Number】** keys. Then press the **【#】** key.

Note

❒ To prevent others from making copies with your user code, press the **【Clear Modes】** key and the **【Clear /Stop】** key simultaneously after copying.

Reference

For setting user codes, ☛ see page 196.

When the Energy Saver indicator is lit

The machine is in Energy Saver mode.

1. Press any key.

The machine will return to the ready condition.

Note

❒ The machine will also return to the ready condition when an original is set in the document feeder, or when the platen cover or the document feeder is opened.

Originals

Standard Size Originals

The machine will detect original of the following sizes and directions as standard size originals:

❒ When you set originals on the exposure glass (platen glass)

Metric version	A3□, B4□, A4□□, B5□□, A5□□, 8 1/2" × 13"□
Inch version	11" × 17"□, 10" × 14"□, 8 1/2" × 13"□, 8 1/2" × 11"□□, 5 1/2" × 8 1/2"□□

❒ When you set originals in the document feeder

Metric version	A3□, B4□, A4□□, B5□□, A5□□, B6□□, 8 1/2" × 13"□, 8 1/2" × 11"□, 11" × 17"□, 11" × 8 1/2"□
Inch version	11" × 17"□, 8 1/2" × 14"□, 8 1/2" × 11"□□, 5 1/2" × 8 1/2"□□, 11" × 15"□, A4□□, 10" × 14"□, 8" × 13"□□, 8" × 10"□

Recommended Originals

Reference

For originals that the document feeder can handle, ☛ see page 241.

Non-recommended Originals for the Document Feeder

Note

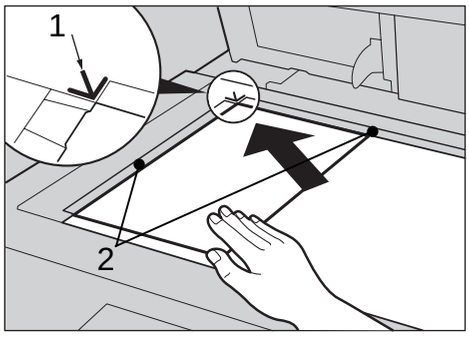
❒ The following types of originals are not recommended for use with the document feeder. Place them directly on the exposure glass (platen glass).

- ❒ Originals thicker than 128g/m², 34 lb
- ❒ Originals thinner than 40g/m², 11 lb
- ❒ For originals between 40 and 52g/m², 11 and 14 lb, the document feeder must be set to ADF Thin paper mode with the user tools. ☛ See page 198.
- ❒ Originals larger than A3, 11" × 17"
- ❒ Originals smaller than B6□□, 5 1/2" × 8 1/2"□□
- ❒ Folded, curled, creased, or damaged originals
- ❒ Mailing labels, or perforated originals
- ❒ Bound, stapled, or clipped originals
- ❒ OHP transparencies
- ❒ Translucent paper
- ❒ Pasted originals
- ❒ Damp originals
- ❒ Sticky originals
- ❒ Wavy originals
- ❒ Originals that are not made from paper
- ❒ Originals written in pencil on both sides, or two-sided carbon originals
- ❒ Thermal fax paper, CRO (camera ready originals) or aluminum foil
- ❒ Books, pamphlets, and booklets

Setting Originals on the Exposure Glass (Platen Glass)

1. Lift the platen cover or the document feeder.

2. Set the original face down on the exposure glass (platen glass). The original should be aligned to the rear left corner.



TCAR050E

1. Reference mark
2. Scale

3. Lower the platen cover or the document feeder.

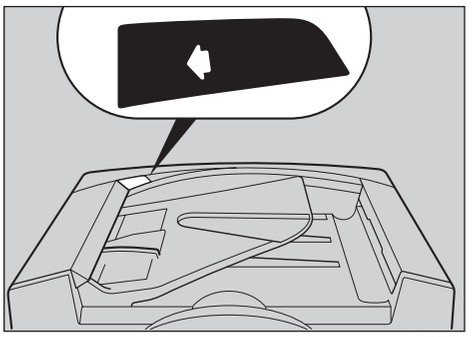
Setting a Stack of Originals in the Document Feeder

You can insert a stack of originals into the document feeder. These originals are individually fed onto and removed from the exposure glass (platen glass).

Note

- ❒ Some originals are unsuitable for the document feeder. ☛ See page 30.
- ❒ Do not press down or hold originals after inserting them.
- ❒ While originals are fed from the original table to the exposure glass (platen glass), do not pull them out.
- ❒ Do not lift the document feeder until the original has been completely fed out.

1. Correct any curl, fold, or crease in the originals before setting the originals.
2. Make sure the **Insert Original** indicator is lit and the exposure glass (platen glass) is clear of originals.

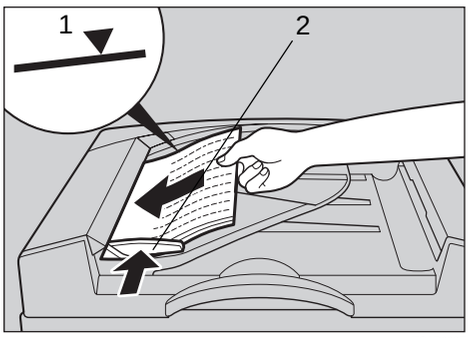


TRSR050E

3. Adjust the guide to the original size.
4. Set the originals *face up* into the document feeder until the **Insert Original** indicator goes off.

Note

- ❒ The last page should be on the bottom.
- ❒ The original guide must touch the front side of the originals.
- ❒ Do not stack originals above the limit mark.



TCAR060E

1: Limit mark
2: Original guide

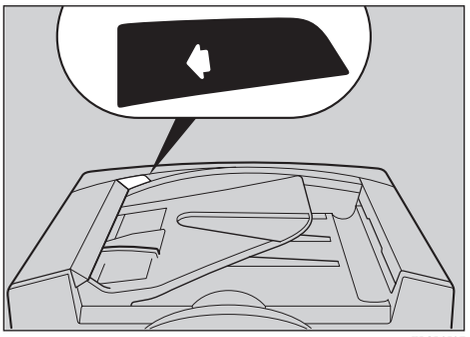
Setting one Original at a Time in the Document Feeder

If you set one original at a time in the document feeder, the second and subsequent originals can be fed and copied automatically without pressing the **[Start]** key.

Note

- ❒ Do not press down or hold originals after inserting them.
- ❒ While originals are fed from the original table to the exposure glass (platen glass), do not pull them out.
- ❒ Do not lift the document feeder until the original has been completely fed out.

1. Correct any curl, fold, or crease in the originals before setting.
2. Make sure the **Insert Original** indicator is lit and the exposure glass (platen glass) is clear of originals.



TRSR050E

3. Adjust the guide to the original size.
4. Set the original *face up* into the document feeder until the **Insert Original** indicator goes off.

Note

- ❒ If you are copying a stack of originals one sheet at a time and you want to keep them in order, start with the last page of the originals.
- ❒ The original guide must touch the front side of the original.

5. Press the **[Start]** key.
6. While the **Auto Feed** indicator is lit after an original is fed, set the next original. The original is automatically fed and copied.



TCAR070E

Note

- ❒ You can adjust the time the machine waits before being ready for the next original with the user tools.
☛ See page 191.

Setting Originals of Different Sizes in the Document Feeder

You can insert a stack of originals of different standard sizes (e.g. A4, B5 etc.) into the document feeder. These originals are individually fed onto and removed from the exposure glass (platen glass).

Preparation

To use this function, you have to select ADF Mixed Sizes mode with the user tools. ☛ See page 198.

Limitation

❒ The weight of originals that can be set with this function is 52 - 81g/m^2, 14 - 20 lb.

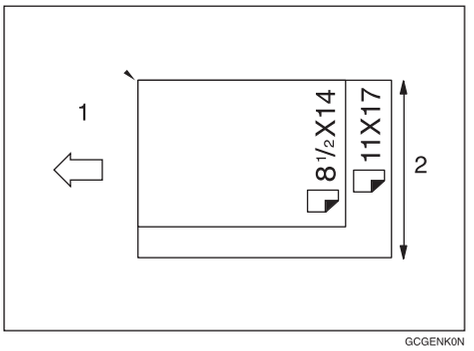
❒ Smaller size originals might be skewed a little.

Note

❒ If your stack of originals contains pages of different sizes, make sure that:

- Longer originals are at the bottom of the stack, and shorter originals are at the top.
- All originals are flush with the back fence of the document feeder.

1 Align the rear and left edges of the originals as shown in the illustration.



1: Set into the document feeder
2: Vertical size

2 Adjust the guide to the widest original size.

3 Set the aligned originals face up into the document feeder.

Setting Non-standard Sized Originals

When copying from non-standard sized originals, enter the original size so that copy is well aligned.

Limitation

❒ You must set your non-standard size originals on the exposure glass (platen glass).

Reference

For the standard sizes the machine can detect, ☛ see page 30.

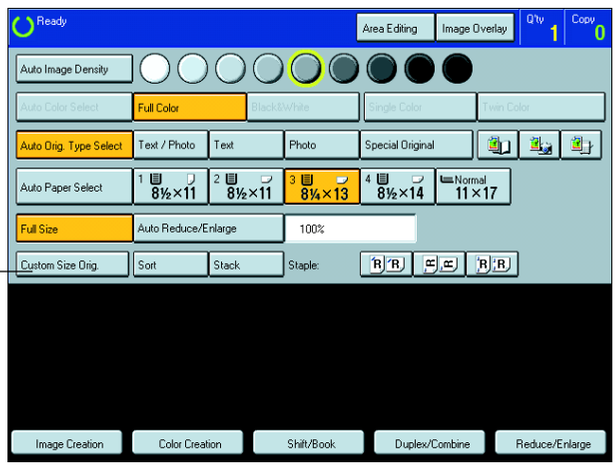
Note

❒ The dimensions you can enter must be within the following ranges:

Vertical size	50 - 297mm (in 1mm steps), 2.0" - 11.7" (in 0.1" steps)
Horizontal size	50 - 432mm (in 1mm steps), 2.0" - 17" (in 0.1" steps)

1 Select the copy paper size.

2 Press the **[Custom Size Orig.]** key.

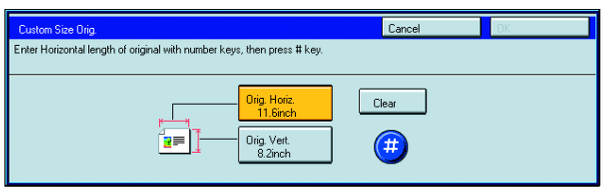


[Custom Size Orig.] key

3 Make sure that the **[Orig. Horiz.]** key is selected. Enter the horizontal size with the **[Number]** keys, then press the **[#]** key.

Note

❒ To change the value entered, press the **[Clear]** key and enter a new value.



4 Press the **[Orig. Vert.]** key and enter the vertical size with the **[Number]** keys, then press the **[#]** key.

5 Press the **[OK]** key.

6 Set your original on the exposure glass (platen glass), then press the **[Start]** key.

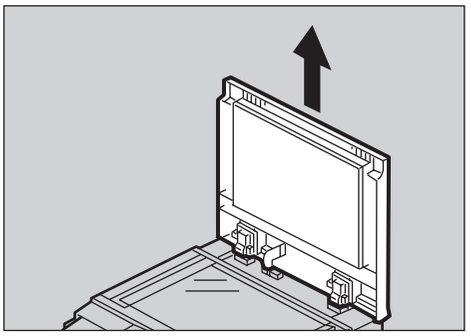
Removing the Platen Cover to Copy a Large Original

You can remove the platen cover to copy a large (more than A3, 11" × 17") original.

Note

❒ You cannot remove the document feeder.

To remove the platen cover, lift it out.

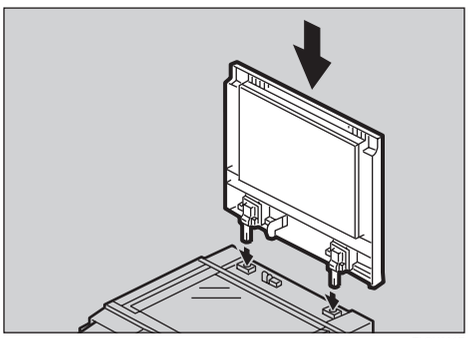


TLCH060E

Note

❒ Lift the platen cover with both hands. Place the removed cover on a flat surface such as a desk and where it will not be damaged.

To reset the platen cover, align the pins of the platen cover and the holes of the copier. Then push the platen cover into the copier.



TLCH061E

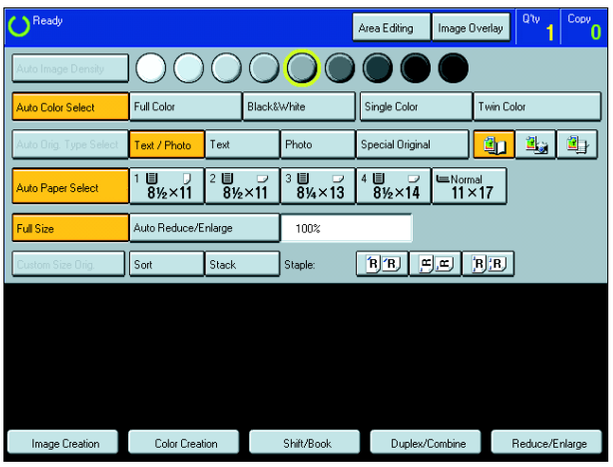
Copying

Basic Operation

How to Make Copies

1. Set your original on the exposure glass (platen glass) or in the document feeder. ☛ See page 31, 32, or 33.

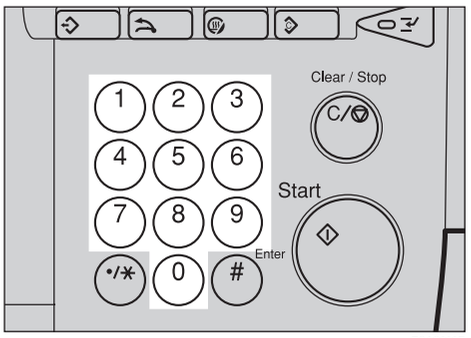
2. Confirm that the **[Auto Color Select]**, **[Text/Photo]**, **[Auto Paper Select]**, **[Full Size]** keys are selected. If not, press the keys.



Note

- ❒ Auto Color Select ☛ see page 40.
- ❒ Text/Photo ☛ see page 44.
- ❒ Auto Paper Select ☛ see page 47.

3. Enter the number of copies required using the **[Number]** keys.

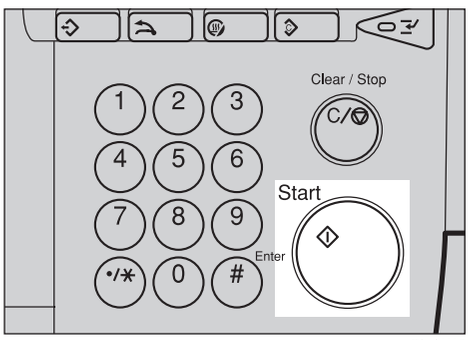


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Note

- ❒ To change the number entered, press the **[Clear/Stop]** key, then enter the new number.

4. Press the **[Start]** key.



TCAS330E

Note

- ❒ To stop the machine during a multi-copy run, press the **[Clear/Stop]** key.
- ❒ To return the machine to the initial condition after copying, press the **[Clear Modes]** key.

Adjusting Copy Image Density

Image density affects the contrast of copies. With these functions you can control the image density so that copies match originals. Make the selection you require then set your originals and press the **[Start]** key.

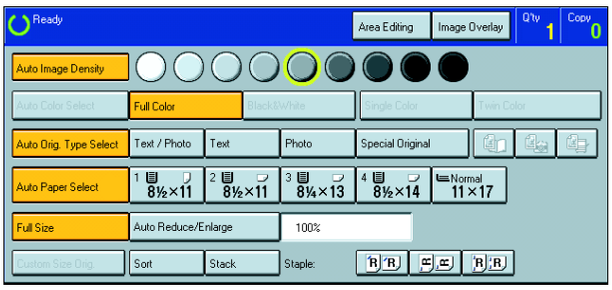
Auto image density

The machine automatically controls the image density.

Note

❒ Auto Image Density and Auto Color Select cannot be set together.

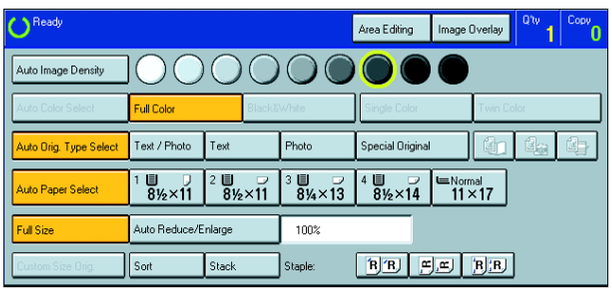
1. If Auto Color Select mode is selected, select other color modes to cancel it. ☛ See page 40.
2. Press the **[Auto Image Density]** key.



Manual image density

If you require darker or lighter copies, adjust the image density yourself.

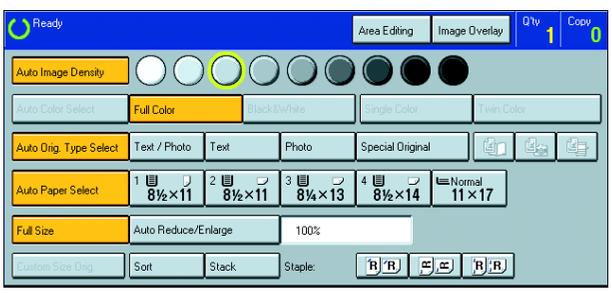
1. If **[Auto Image Density]** key is selected, press it to cancel it.
2. Press the desired color density level.



Combined auto and manual image density

Use when copying originals with a dirty background (such as newspapers). You can adjust the foreground density while masking out the dark background.

1. If Auto Color Select mode is selected, select other color modes to cancel it. ☛ See page 40.
2. Press the **[Auto Image Density]** key.
3. Press the desired color density level.



Selecting a Color Mode

Select a color mode that best suits your originals and copying requirements.

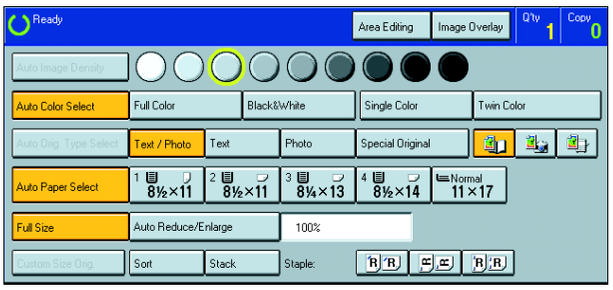
Auto color select mode

The machine automatically detects whether the original has color parts or not. Originals with only black images will be copied in Black & White mode. Originals with some color areas will be copied in Full Color mode.

Note

❒ If you make one copy set of a black original using the document feeder, it is recommended to select Black & White mode. If you choose Auto Color Select mode, the machine will reset the color selection for every original page, taking a long time to complete the job.

1 Make sure that the **[Auto Color Select]** key is selected.



Note

❒ If not, press the **[Auto Color Select]** key.

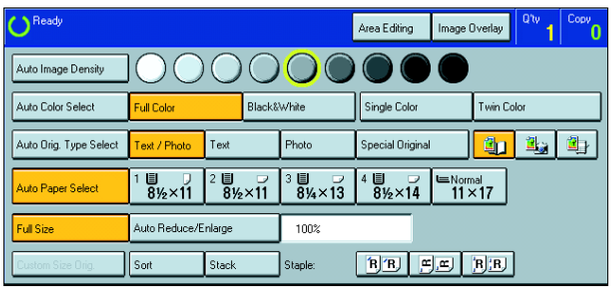
2 Set your originals, then press the **[Start]** key.

Full color copy mode

This function makes copies in full color.

❒ You can adjust the overall color tone of copies. ☛ See page 124.

1 Press the **[Full Color]** key.

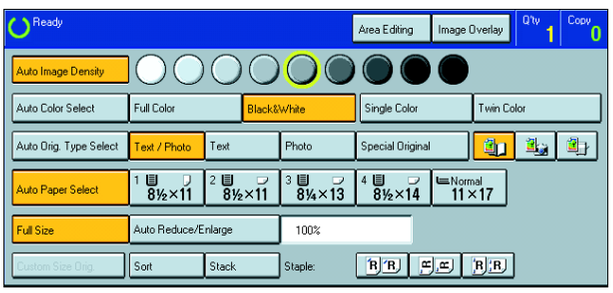


2 Set your originals, then press the **[Start]** key.

Black & White copy mode

This function makes copies in black.

1 Press the **[Black & White]** key.



2 Set your originals, then press the **[Start]** key.

Single color mode

This function makes copies in single colors.

Note

• 12 basic colors:

Yellow, Orange, Red, Magenta, Green, Cyan, Blue, Yellow Green, Beige, Marine Blue, Pink, Purple

• 15 user colors:

Up to 15 colors can be manually mixed and stored in memory. ☛ See page 137.

• 1 scanned color (Only for Edit type):

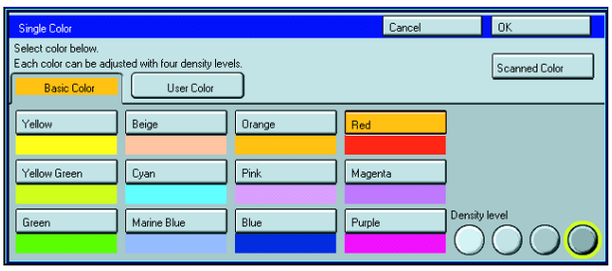
You can scan in a color from an original. ☛ See page 42.

Reference

For copy samples, ☛ see page 12.

-Basic color

1. Press the **[Single Color]** key.
2. Select the color.



Note

❒ You can select the color density level.

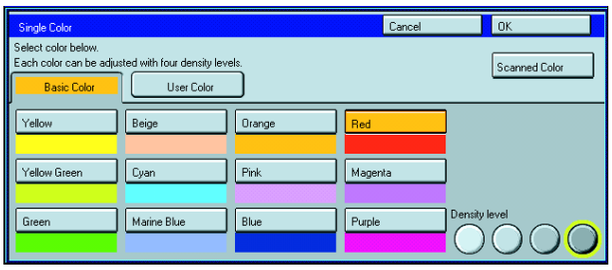
3. Press the **[OK]** key.
4. Set your originals, then press the **[Start]** key.

-User colors

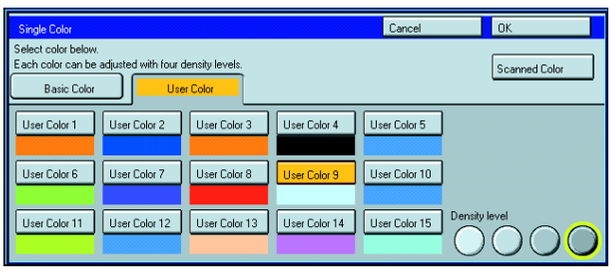
Note

❒ When Single Color copying, user colors might come out lighter.

1. Press the **[Single Color]** key.
2. Press the **[User Color]** key.



3. Select the color.



Note

❒ You can select the color density level.

4 Press the **[OK]** key.

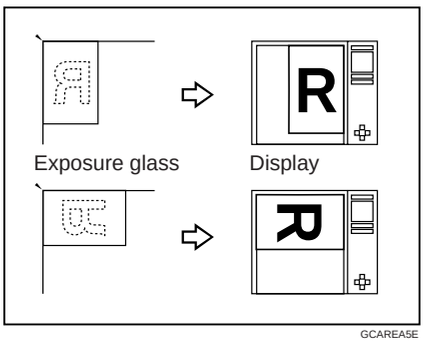
5 Set your originals, then press the **[Start]** key.

-Scanned color (Only for Edit type)

Note

❒ When Single Color copying, Scanned colors might come out lighter.

❒ "Scanned color" means that the color is specified from the original image directly.

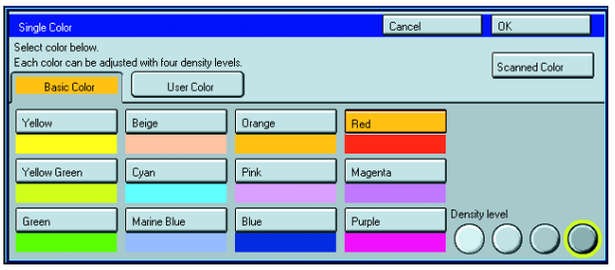


1 Press the **[Single Color]** key.

2 Set your original, then press the **[Scanned Color]** key.

Note

❒ The image of the original is displayed.



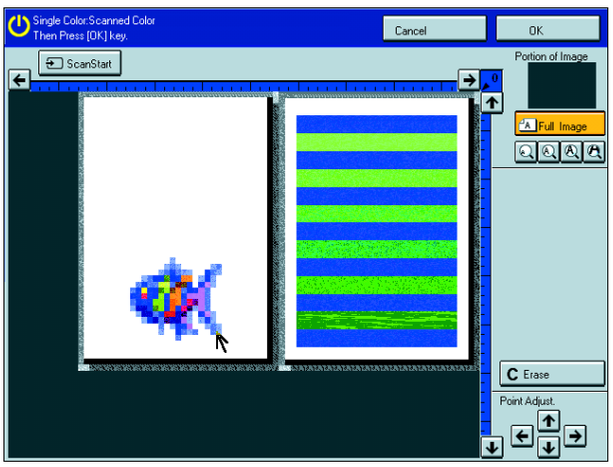
3 Press the color on the image you wish to scan in with the editor pen.

Note

❒ Point to an area of color with a radius of at least 5 mm.

❒ To cancel the pointing, press the **[Erase]** key.

❒ For details of this display, ☛ see page 142.



4 Press the **[OK]** key.

Note

❒ The color you have chosen is scanned in.

5 Press the **[Start]** key.

Twin color mode

This function makes copies with black parts in the selected color and other parts in the other selected color.

Reference

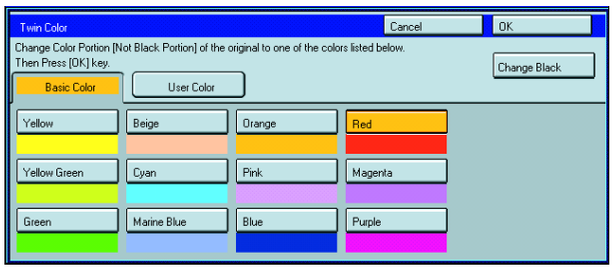
For copy samples, ☛ see page 12.

Note

❒ You can have colored areas copied in one of the following colors:
Red, Green, Blue, Yellow, Cyan, Magenta, Yellow Green, Orange, Marine Blue, Beige, Pink, Purple and User Colors
❒ You can have black parts copied in one of the following colors:
Red, Green, Blue, Yellow, Cyan, Magenta, Yellow Green, Orange, Marine Blue, Beige, Pink, Purple, and User Colors

1. Press the **[Twin Color]** key.

2. Select the color you want to copy in for the color parts of the original.



3. If you want to change the black parts, press the **[Change Black]** key.

Note

❒ If you don't want to change the black parts, go to step 5.

4. Select the color you want to copy in for the black parts of the original.
5. Press the **[OK]** key.
6. Set your originals, then press the **[Start]** key.

Selecting the Original Image Type

To optimize the likeness between copies and originals, select an image type that matches your originals.

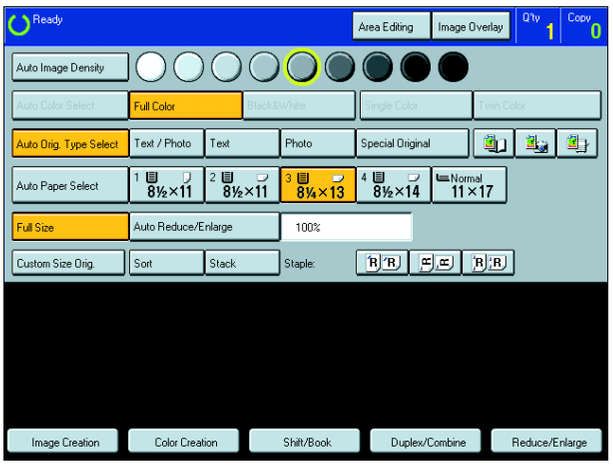
Note

❒ You can adjust the readability of black lettering in colored areas, ☛ see page 131.

Auto original type select mode

This mode is selected automatically when the Full Color is selected and optimizes the likeness of copies to originals.

1 Press the **[Auto Original Type Select]** key.



2 Set your originals, then press the **[Start]** key.

Text/Photo mode

This mode automatically detects the areas of your original containing text or photographs. The text areas are copied using Text mode, and the photographs are copied with Photo mode.

Note

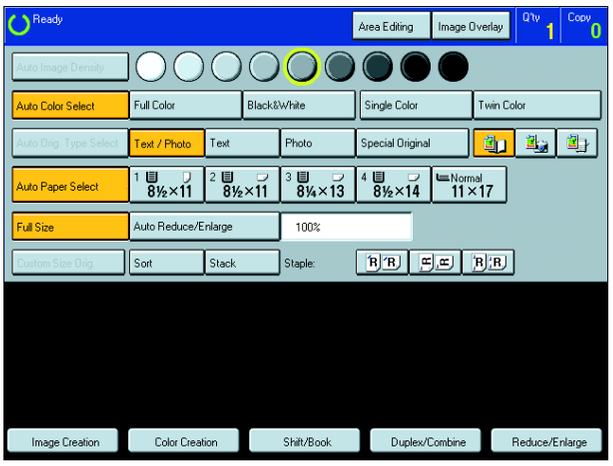
❒ There are 3 types of Photo mode:

- **[Press Print]**: Use when copying photographs or pictures that are printed on paper (e.g. magazines).
- **[Glossy Photo]**: Use when copying developed photographs.
- **[2nd Generation]**: Use when copying copies or originals printed from printers.

1 Make sure that the **[Text/Photo]** key is selected.

Note

❒ If not, press the **[Text/Photo]** key.



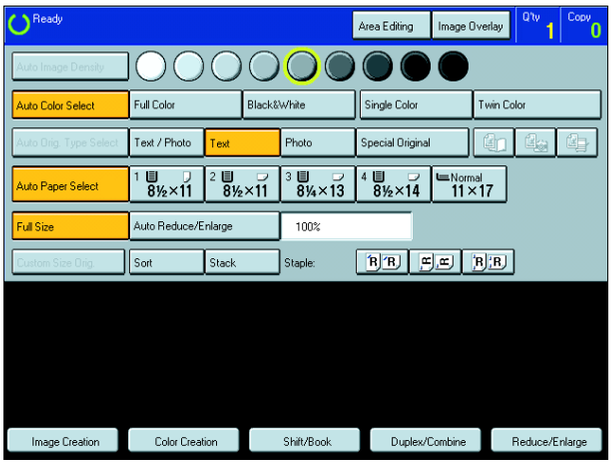
2 Select your desired photo mode.

3 Set your originals, then press the **[Start]** key.

Text mode

This modes is suitable for copying originals consisting of characters, line diagrams, and letter, but not photographic images.

1 Press the **[Text]** key.



2 Set your originals, then press the **[Start]** key.

Photo mode

This mode is suitable for copying originals consisting of pictures, photographs, and screened letters/areas, but not solid letters.

Note

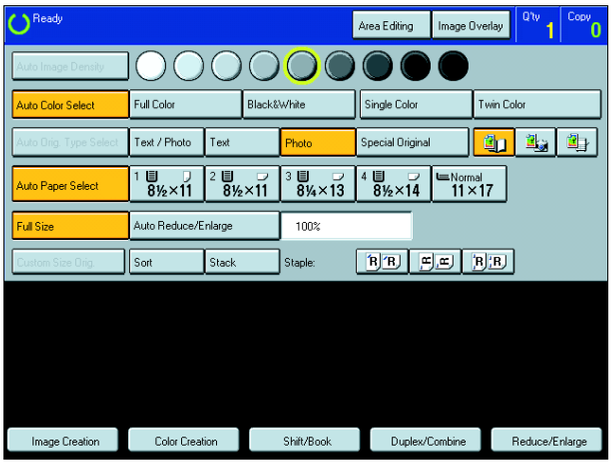
❒ There are 3 types of Photo mode:

[Press Print]: Use when copying photographs or pictures that are printed on paper (e.g. magazines).

[Glossy Photo]: Use when copying developed photographs.

[2nd Generation]: Use when copying copies or originals printed from printers.

1 Press the **[Photo]** key.



2 Select your desired photo mode.

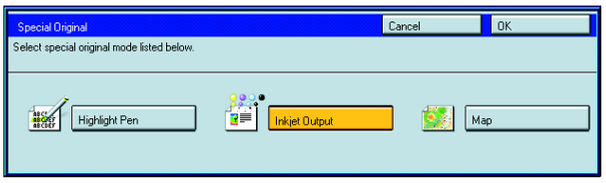
3 Set your originals, then press the **[Start]** key.

Special original mode

Use this function for originals written in highlight pen, originals printed from inkjet printers, or maps.

1. Press the **[Special Original]** key.

2. Select your desired original type from the **[Highlight Pen]**, **[Inkjet Output]**, and **[Map]** key.



3. Set your originals, then press the **[Start]** key.

Selecting the Copy Paper Size

Select a suitable size of copy paper based on the original size and the reproduction ratio.

Auto paper select

The machine automatically selects a suitable size of copy paper based on the original size and the reproduction ratio.

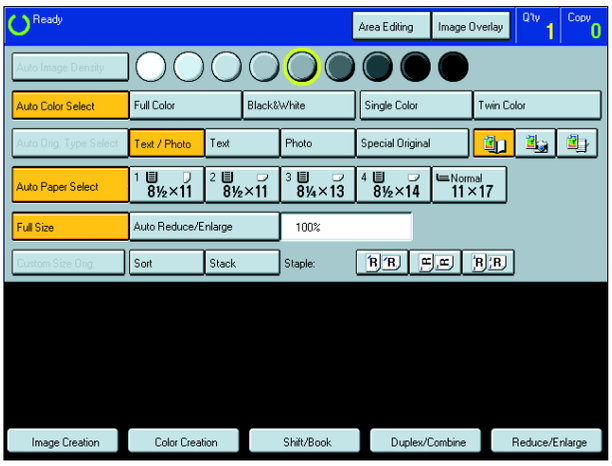
Reference

For functions that cannot be used together with this function, see page 106.

Note

❒ Depending on the original type and size you use, the machine cannot detect original size. In this case, select paper size manually.

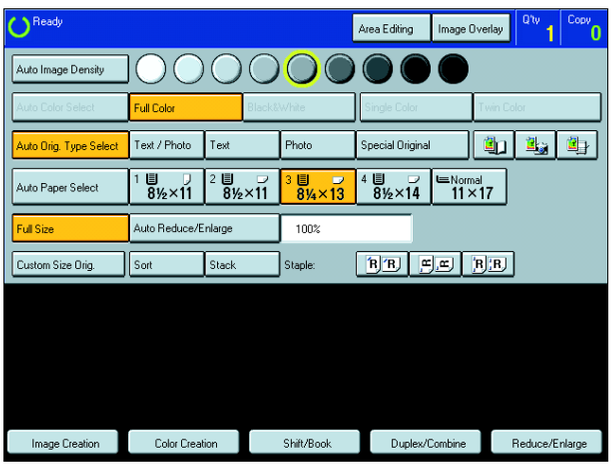
1. Make sure that the **[Auto Paper Select]** key is selected.



Manual paper select

You can select the copy paper manually.

1. Select the copy paper.

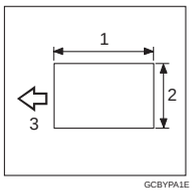


Copying from the Bypass Tray

Use the bypass tray to copy onto thick paper, adhesive labels, OHP transparencies, or non-standard size paper. Also use the bypass tray to copy onto the reverse side of paper that has already been copied onto.

Note

❒ The following limitations apply:

<table>
<tr><td rowspan="4">Acceptable paper types</td><td colspan="2">Normal paper (64 ~ 105g/m², 17 ~ 28 lb)
Thick paper (105 ~ 157g/m², 28 ~ 42 lb)
Extra thick paper (157 ~ 256g/m², 42 ~ 68 lb)
Post cards
OHP transparencies
Adhesive labels
Translucent paper</td></tr>
<tr><td rowspan="2">Standard size</td><td>Metric version:
▭: A3, B4, A4, B5, A5, B6, 11" × 17", 12" × 18", 13" × 19"
▯: A4, B5, A5, B6, A6, 11" × 8 1/2"</td></tr>
<tr><td>Inch version:
▭: 8 1/2" × 11", 8 1/2" × 5 1/2", 10" × 14", 11" × 17", 12" × 18", 13" × 19", A3
▯: 8 1/2" × 11", 8 1/2" × 5 1/2", A4</td></tr>
<tr><td>Non-standard size
 

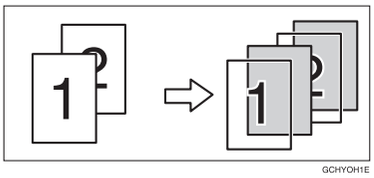
1:Horizontal 2:Vertical
3:Feed direction</td><td>Metric version:
Vertical: 100 ~ 330mm (in 1mm steps)
Horizontal: 140 ~ 483mm (in 1mm steps)

Inch version:
Vertical: 3.9" ~ 13" (in 0.1" steps)
Horizontal: 5.5" ~ 19" (in 0.1" steps)</td></tr>
<tr><td>Number of sheets that can be set at one time</td><td colspan="2">Normal paper, OHP transparencies: 50 sheets
Thick paper, Extra thick paper, Post cards: 20 sheets
Adhesive labels: 1 sheet
Translucent paper: 50 sheets</td></tr>
</table>

❒ Select one of the following settings or keys:

[Normal Paper] : normal paper
[Thick] : thick paper, post cards, adhesive labels, translucent paper
[Extra Thick] : Heavier than 157g/m², 42 lb
[OHP] : OHP transparencies
[Duplex Back] : Copying onto the reverse side of paper that has been already copied onto. ☛ See page 52.
[Custom Size] : Select this after the paper type for non-standard sized paper. ☛ See page 50.

❒ When you copy onto OHP transparencies, you can select whether a blank slip sheet is inserted between OHP transparencies.



❒ When you set several sheets at a time, fan them to get air between them before loading.

❒ If the copy paper is curled, gently roll it to remove the curl.

❒ When you copy onto OHP transparencies, insert them with the copy side up.

❒ Do not stack copy paper above the limit mark.

❒ If the copy paper is curled, correct it before setting paper in the bypass tray. If the curled is not corrected, a paper misfeed might occur.

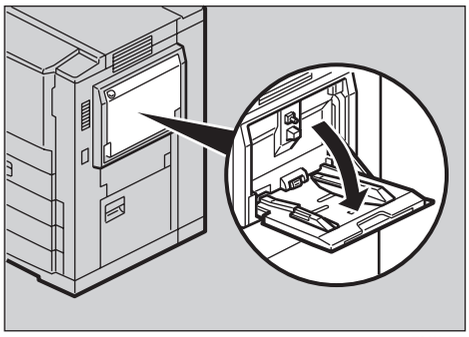
❒ When the optional sorter stapler is installed, copies made onto thick or OHP transparencies are not delivered in the proof tray but in the first bin instead.

Copying onto standard size paper with the bypass tray

Note

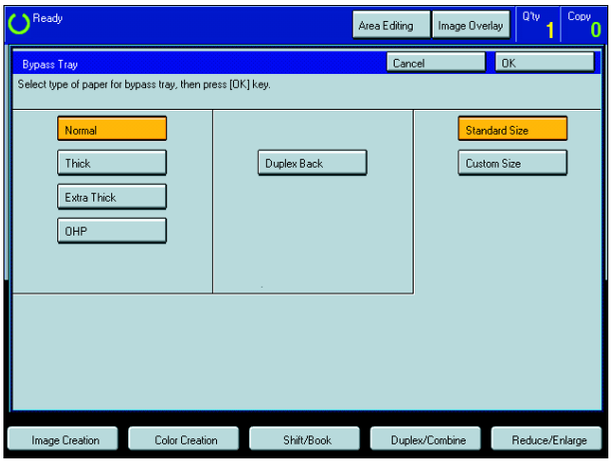
❒ When you copy onto the reverse side of paper that has been already copied onto, ☛ see page 52.

1 Open the bypass tray.



TCAH050E

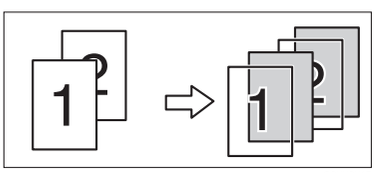
2 Press the **[Normal Paper]**, **[Thick]**, **[Extra Thick]**, or **[OHP]** key.



Note

❒ Make sure that the **[Standard Size]** key is selected.

❒ When you copy onto OHP transparencies, you can select whether a blank slip sheet is inserted between OHP tranparencies.



GCHYOH1E

3 Press the **[OK]** key.

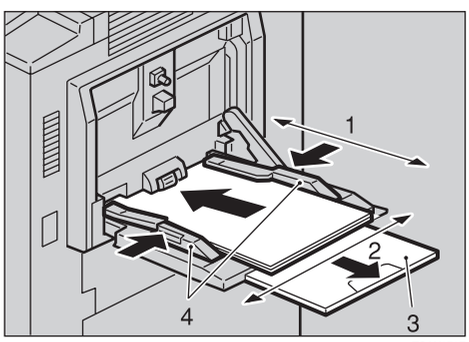
4 Adjust the paper guides to the paper size.

Note

❒ Make sure that the paper guides matches to the paper size. If the paper guides are not adjusted to the paper size properly, paper might be skewed or a paper misfeed might occur.

❒ With large copy paper (more than A4□, 8 1/2" × 11"□), swing out the extender.

5 With the side you wish to copy onto face up, insert the paper into the bypass tray until it stops.



TCAH070E

1:Horizontal size
2:Vertical size
3:Extender
4:Paper guides

Note

❒ The paper size is displayed.

6 Set your originals, then press the **[Start]** key.

Copying onto non-standard size paper with the bypass tray

Preparation

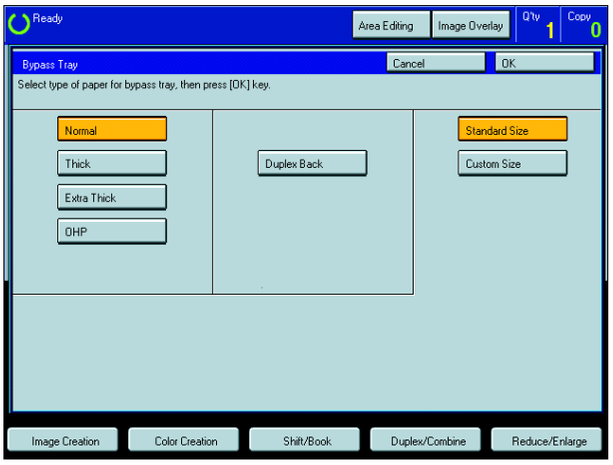
You can register non-standard paper sizes you use often in keys **[Custom1]**, **[Custom2]**, and **[Custom3]** with the user tools. ☞ See page 193.

Note

❒ Be sure to set the size. Otherwise, a paper misfeed might occur.

1 Open the baypass tray.

2 Press the **[Normal Paper]**, **[Thick]**, **[Extra Thick]**, or **[OHP]** key.

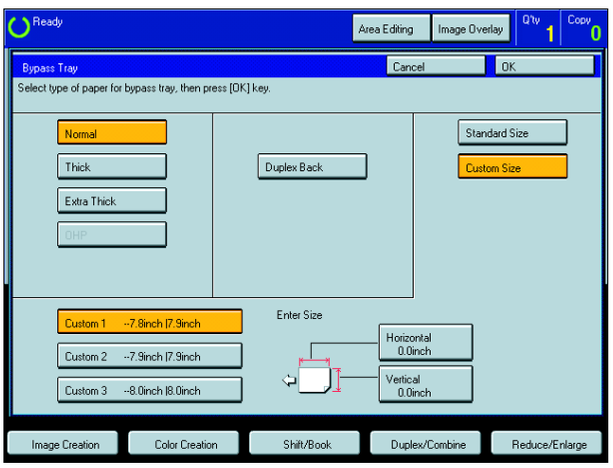


3 Press the **[Custom Size]** key.

4 Select **[Custom1]**, **[Custom2]**, **[Custom3]** or **[Enter Size]** keys.

Note

❒ If you select **[Custom1]**, **[Custom2]**, or **[Custom3],** go to step 7.



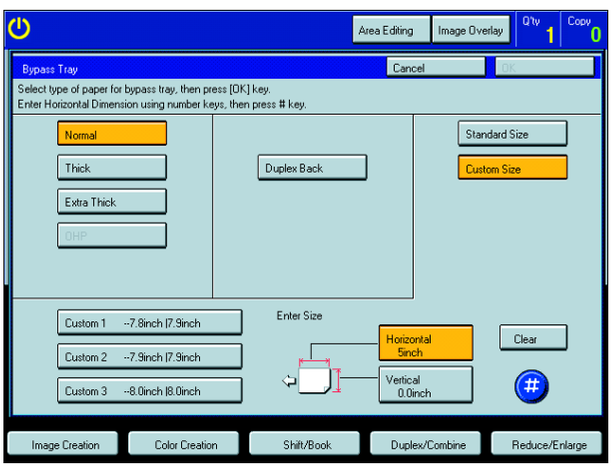
5 If you select **[Enter Size]** in step 4, enter the horizontal paper size with the **[Number]** keys, then press the **[#]** key.

Note

❒ To change the value entered, press the **[Clear/ Stop]** key and enter a new value.

6 Enter the vertical paper size with the **[Number]** keys, then press the **[#]** key.

7 Press the **[OK]** key.



8 Adjust the paper guides to the paper size.

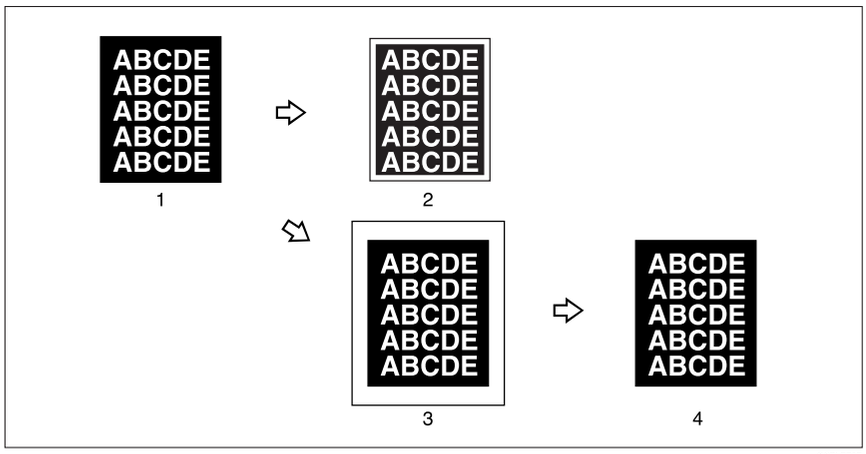
Note

❒ Make sure that the paper guides match the paper size. If the paper guides are not adjusted to the paper size properly, paper might be skewed or a paper misfeed might occur.

9 Insert the paper into the bypass tray.

10 Set your originals, then press the **[Start]** key.

Making A3, 11" × 17" full bleed copies



1: A3, 11" × 17" size Original
2: In standard copy mode, margins appear on copies
3: 12" × 18" or 13" × 19" Full Bleed Copy
4: Cut around the margins to produce a full image

If you adjust the paper guides of the bypass tray more than A3 (11") size, A3 11" × 17" full bleed copying mode is automatically selected.

In this mode, you can make A3, 11" × 17" full bleed copies with 12" × 18" or 13" × 19" paper. This is useful to make A3, 11" × 17" size copies with colored background (e.g. catalogues).

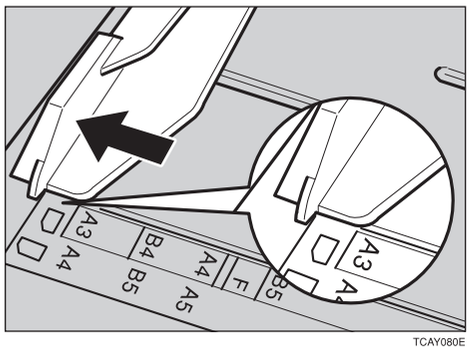
Note

❒ This function can be used with 12" × 18" or 13" × 19" paper.

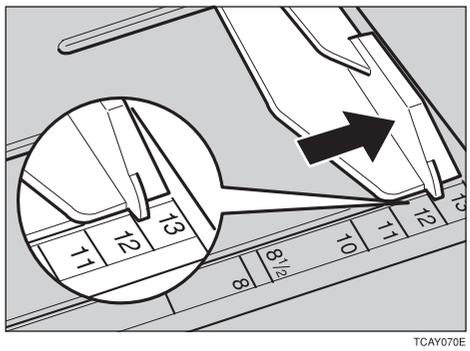
❒ When A3, 11" × 17" full bleed copying mode is selected, the paper direction is automatically changed to widthwise ▭.

❒ If you want to select this mode, expand the paper guides as shown in the illustration.

<Left guide>



<Right guide>

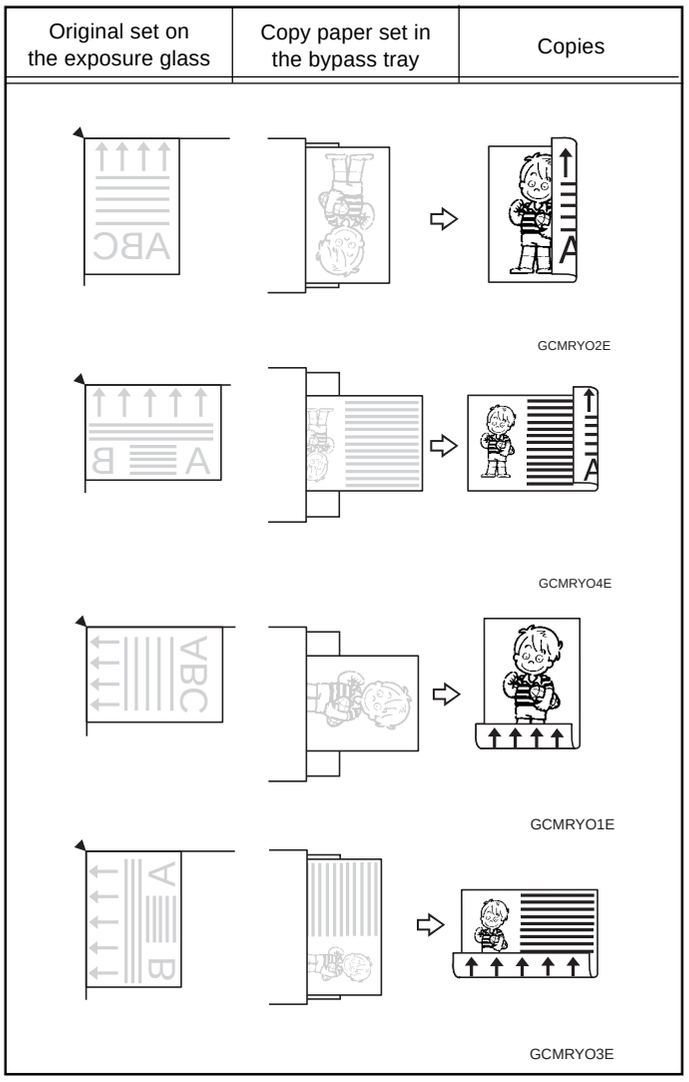


Copying onto the reverse side of paper that has been already copied onto

Note

❒ If you wish to copy 2 sided onto normal paper, use the Duplex feature. ☛ See page 68.

❒ Make sure that you set your original and the copy paper in the correct direction to achieve the results you require.



❒ You cannot use this function for OHP transparencies, translucent paper, adhesive labels and postcards.

❒ Do not use copy paper that has been already copied on with other machines.

❒ If the copy paper is curled, correct it before setting paper in the bypass tray. If the curl is not corrected, a paper misfeed might occur.

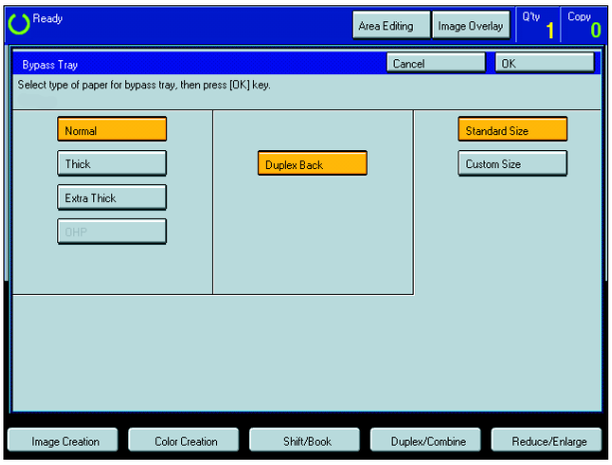
1 Open the bypass tray.

2 Insert the paper into the bypass tray.

Note

❒ Make sure the front side (the side that has been copied onto) faces down.

3 Press the **[Duplex Back]** key.



Note

❒ When you copy onto non-standard size paper, press the **[Custom Size Orig.]** key and select or enter the size. For details, ☛ see page 50.

4 Press the **[OK]** key.

5 Adjust the paper guides to the paper size.

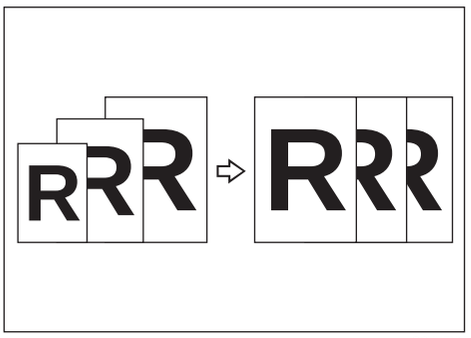
Note

❒ Make sure that the paper guides match the paper size. If the paper guides are not adjusted to the paper size properly, paper might be skewed or a paper misfeed might occur.

6 Set your originals, then press the **[Start]** key.

Auto Reduce/Enlarge—Having the Machine Choose the Reproduction Ratios

The machine can select the proper reproduction ratio based on the selected paper size and the original size.



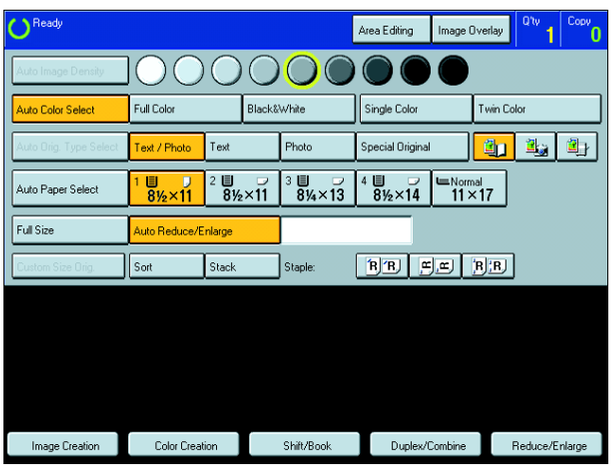
GCYHEN1E

Reference

For functions that cannot be used together with this function, ☛ see page 106.

Example:
Metric version: original: A3□, copy paper: A4□
Inch version: original: 11" × 17"□, copy paper: 8 1/2" × 11"□

1 Press the **[Auto Reduce/Enlarge]** key.



2 Set your original on the exposure glass (platen glass) or in the document feeder. ☛ See page 31, 32 or 33.

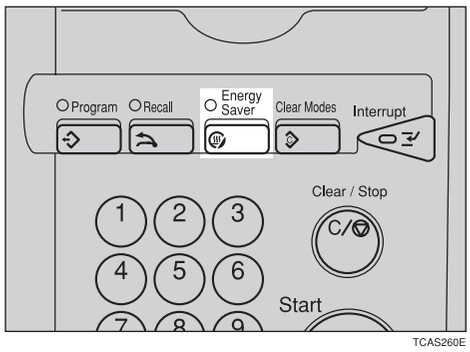
3 Choose your copy paper size (e.g. A4□, 8 1/2" × 11"□).

4 Press the **[Start]** key. The original image is enlarged or reduced to fit the selected copy paper.

Energy Saver Mode—Saving Energy

If you do not operate the machine for a certain period after copying or press the **[Energy Saver]** key, the display goes out and the machine enters Energy Saver mode. When you press the **[Energy Saver]** key again and originals are set in the document feeder or when the platen cover or document feeder is opened, the machine returns to the ready condition. In Energy Saver mode, the machine uses less electricity.

1 Press the **[Energy Saver]** key to enter the Energy Saver mode.



TCAS260E

Note

❒ To cancel this mode, press the **[Energy Saver]** key again.

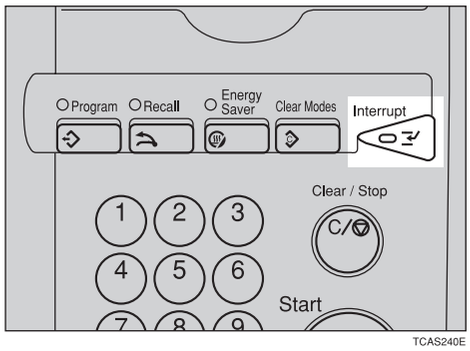
Interrupt Copying—Temporarily Stopping one Job to Copy Something Else

Use the **[Interrupt]** key to interrupt a copy run and make urgently needed copies.

Reference

For functions that cannot be used together with this function, ☛ see page 106.

1 Press the **[Interrupt]** key. The machine will stop the copy run and store the present settings in the memory. The machine will return to the ready condition.



TCAS240E

2 Remove the previous originals. Set your original for interrupt copying on the exposure glass (platen glass) or in the document feeder.

3 Make your copies.

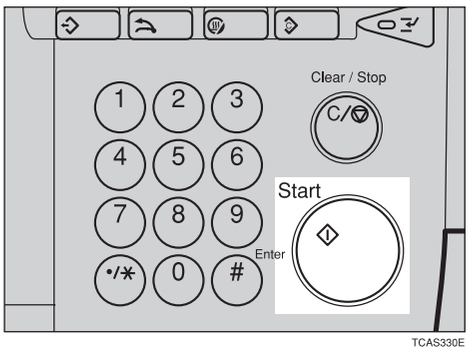
4 After interrupt copying is completed, press the **[Interrupt]** key again. The machine will recall the previous copy settings.

5 Reset the previous originals and press the **[Start]** key to resume the previous run.

Auto Start—Entering Copy Job Settings during the Warm-up Period

If you press the **[Start]** key during the warm-up period, the **[Start]** key will blink and the machine will start copying after the warm-up period.

1. Set your copy settings during the warm-up period.
2. Press the **[Start]** key.



TCAS330E

Note

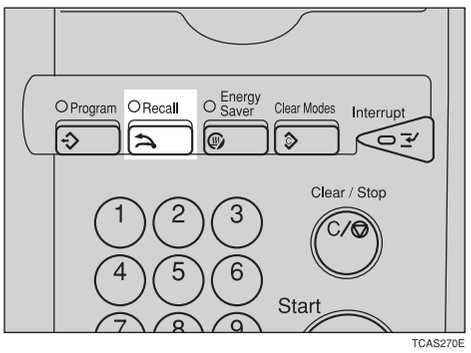
❒ To cancel Auto Start, press the **[Clear/Stop]** key.

Recall—Recalling the Previous Job Settings

This machine automatically stores the previous job settings. If you want to copy with the same settings as the previous job, press the **[Recall]** key. You can also change the recalled job settings.

Note

❒ When the recalled job setting is for area editing or image overlay, you cannot change it.



TCAS270E

Program—Storing and Recalling Your Copy Settings in Memory

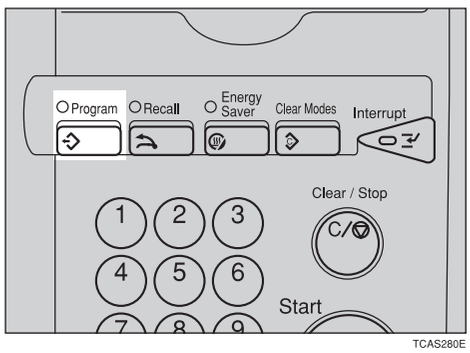
You can store up to five frequently used copy job settings in machine memory and recall them for future use.

Note

❒ If you want to change the stored programs, store another program again.

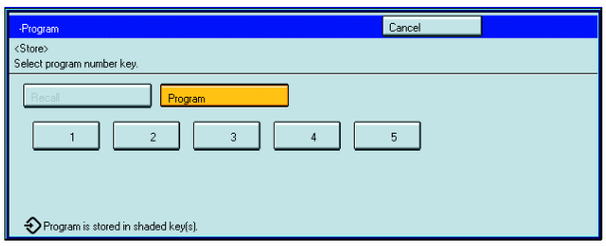
Storing Your Settings

1. Set the copy settings you want to put into memory.
2. Press the **[Program]** key.



TCAS280E

3. Press the **[Program]** key.



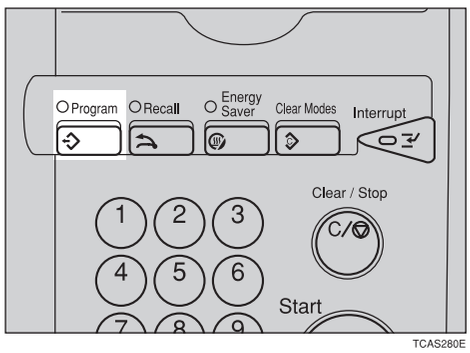
4. Select the program number you want to store the settings in.

Note

❒ If this program number is already being used, the machine asks whether you wish to overwrite it or not. Press the **[Yes]** or **[No]** key.

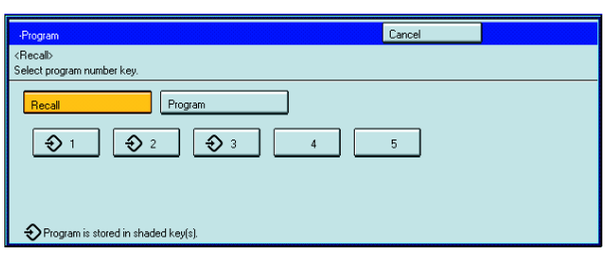
Recalling Your Settings

1. Press the **[Program]** key.



TCAS280E

2. Press the **[Recall]** key.



3 Select the program number you want to recall.
The stored settings are displayed.

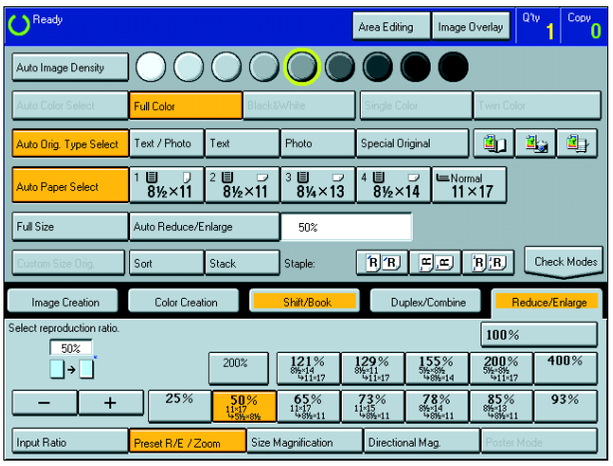
Note

❒ Only programs with ⇨ contain a program.

4 Set your originals, then press the **[Start]** key.

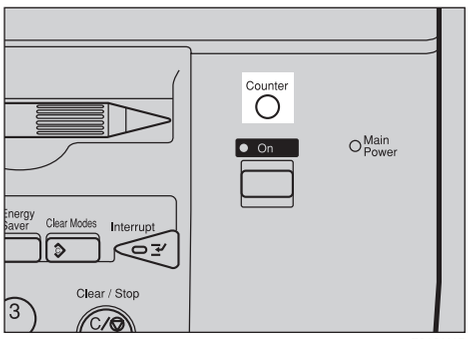
Check Modes—Checking the Selected Copy Jobs

By pressing the **[Check Modes]** key, you can see at a glance the modes you have selected.



Counter—Checking the Total Number of Copies Made

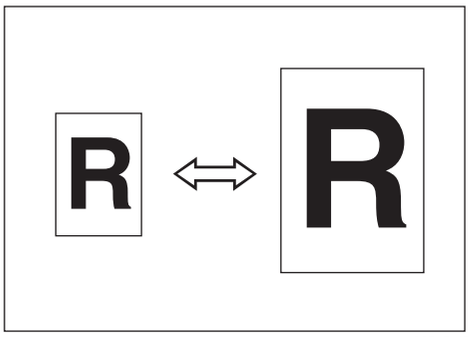
By pressing the **[Counter]** key, you can check the total number of copies made.



TCAS220E

Reduce/Enlarge—Reducing and Enlarging

Preset R/E—Reducing and Enlarging Using Preset Ratios



GCTHEN1E

Reference

For functions that cannot be used together with this function, ☛ see page 106.

Note

❒ You can add up to two preset ratios with the user tools. ☛ See page 195.

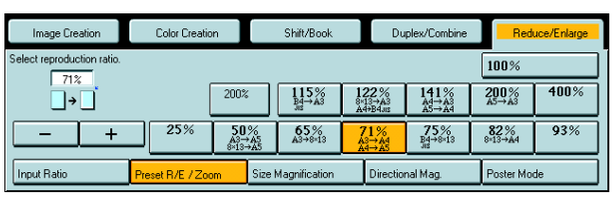
❒ You can select a ratio regardless of the size of an original or copy paper. With some ratios, parts of the image might not be copied or margins will appear on copies.

❒ To return to 100%, press the **[100%]** key.

Reducing

1. Press the **[Reduce/Enlarge]** key.

2. Make sure that the **[Preset R/E / Zoom]** key is selected.



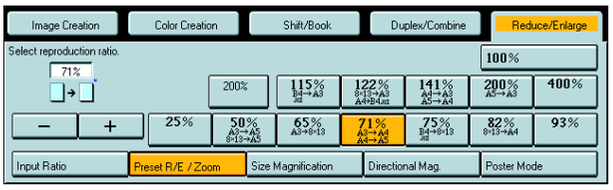
3. Select the ratio you require.

4. Set your originals, then press the **[Start]** key.

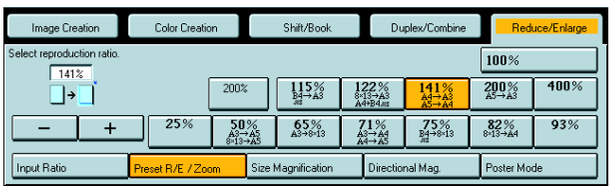
Enlarging

1. Press the **[Reduce/Enlarge]** key.

2. Make sure that the **[Preset R/E / Zoom]** key is selected.



3. Select the ratio you require.



4. Set your originals, then press the **[Start]** key.

Zoom—Reducing and Enlarging in 1% Steps



GCZOOM1E

You can change the reproduction ratio from 25% to 400% in 1% steps.

Note

❒ You can select a ratio regardless of the size of an original or copy paper. With some ratios, parts of the image might not be copied or blank margins will appear on copies.

❒ To return to 100%, press the **[100%]** key.

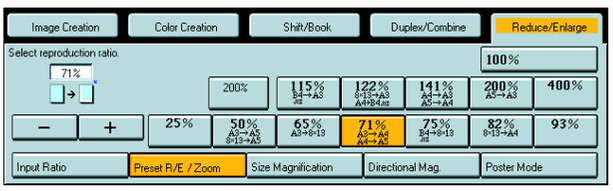
❒ You can select a preset ratio which is near the desired ratio, then press the **[Zoom]** key and adjust the ratio with the **[+]** or **[-]** key.

❒ There are two ways to set the ratios.

Using the [-] and [+] keys

1. Press the **[Reduce/Enlarge]** key.

2. Make sure that the **[Preset R/E / Zoom]** key is selected.



3 Adjust the reproduction ratio with the **[+]** or **[-]** key.

Note

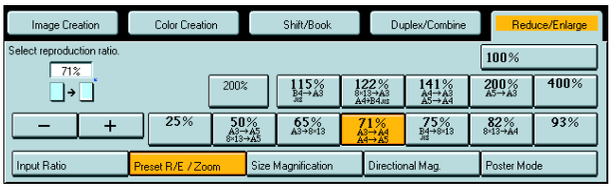
❒ To change the ratio entered, press the **[Clear/Stop]** key and enter a new ratio.

4 Set your originals, then press the **[Start]** key.

Using the [Number] keys

1 Press the **[Reduce/Enlarge]** key.

2 Press the **[Input Ratio]** keys.



3 Enter the reproduction ratio with the **[Number]** keys.

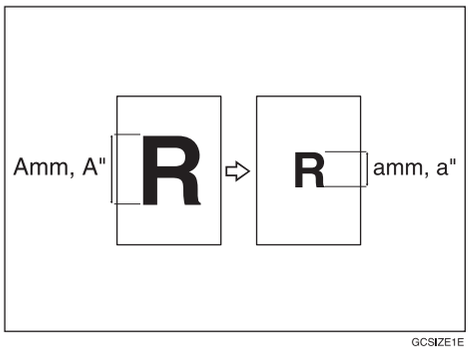
Note

❒ To change the ratio entered, press the **[Clear]** key and enter a new ratio.

4 Press the **[#]** key.

5 Set your originals, then press the **[Start]** key.

Size Magnification—Fitting the Original to a Copy of a Different Size



The suitable reproduction ratio will be automatically selected when you enter the length of the original and the length of the copy image you want.

Note

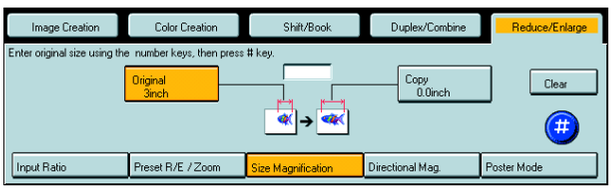
❒ You can select a ratio regardless of the size of an original or copy paper. With some ratio, parts of the image might not be copied or blank margins might appear on copies.

❒ You can select a ratio from between 25% to 400%.

1. Press the **[Reduce/Enlarge]** key.

2. Press the **[Size Magnification]** key.

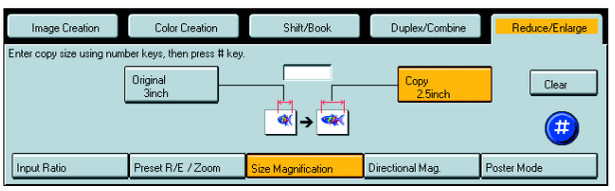
3. Enter the original size with the **[Number]** keys, then press the **[#]** key.



Note

❒ Up to 999mm (metric version), 99.99" (inch version) can be entered.

4. Enter the copy paper size with the **[Number]** keys, then press the **[#]** key.

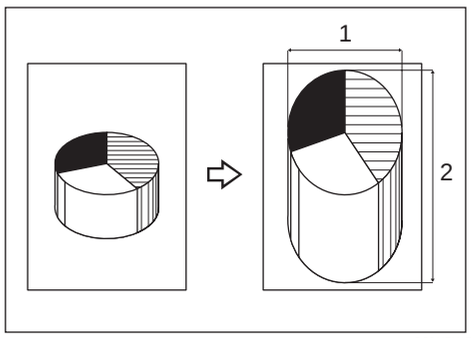


Note

❒ To change the ratio entered, press the **[Original]** key or the **[Copy]** key then enter a new ratio.

5. Set your originals, then press the **[Start]** key.

Directional Magnification (%)—Stretching and Squeezing the Image in 1% Steps



1: Horizontal %
2: Vertical %

Copies can be reduced or enlarged at different reproduction ratios horizontally and vertically.

Note

❒ You can select a ratio from between 25% to 400%.

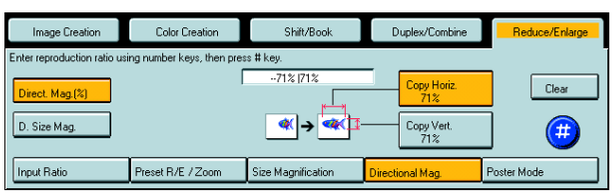
❒ You can select a ratio regardless of the size of an original or copy paper. With some ratio, parts of the image might not be copied or blank margins might appear on copies.

1 Press the **[Reduce/Enlarge]** key.

2 Press the **[Directional Mag.]** key.

3 Make sure that the **[Direct. Mag (%)]** key is selected.

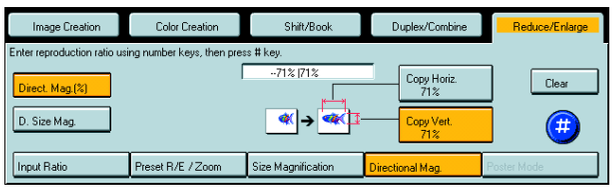
4 Enter the horizontal ratio with the **[Number]** keys, then press the **[#]** key.



Note

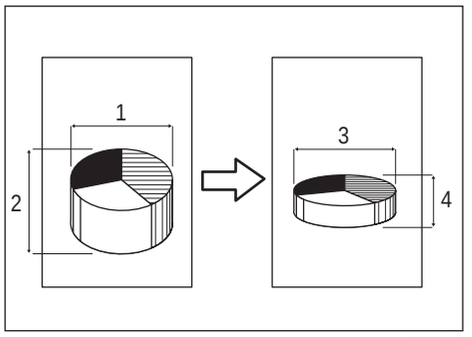
❒ To change the ratio entered, press the **[Clear]** key and enter a new ratio.

5 Enter the vertical ratio with the **[Number]** keys, then press the **[#]** key.



6 Set your originals, then press the **[Start]** keys.

Directional Size Magnification (inch)—Stretching and Squeezing the Image into the Copy Area



GCDHEN2E

1: Horizontal original size
2: Vertical original size
3: Horizontal copy size
4: Vertical copy size

The suitable reproduction ratios will be automatically selected when you enter the horizontal and vertical lengths of the original and copy image you require.

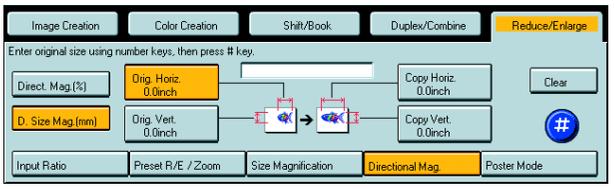
Note

❒ You can enter sizes within the following ranges:

Metric Version	1 - 999mm (in 1mm steps)
Inch Version	0.1" - 99.9" (in 0.1" steps)

❒ If the calculated ratio is over the maximum or under the minimum ratio, it is corrected within the range of the ratio automatically. However, with some ratios, parts of the image might not be copied or blank margins might appear on copies.

1. Press the **[Reduce/Enlarge]** key.
2. Press the **[Directional Mag.]** key.
3. Press the **[D. Size Mag. (inch)]** key.
4. Enter the horizontal original size with the **[Number]** keys, then press the **[#]** key.

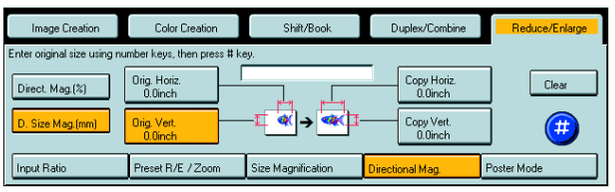


Note

❒ To change the value entered:

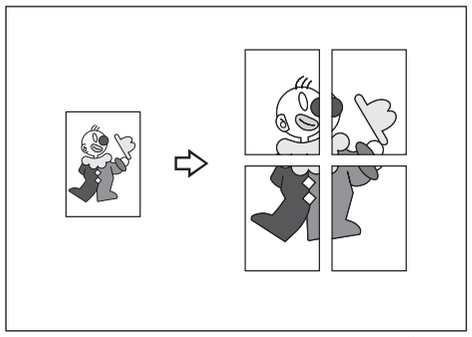
- If you have not pressed the **[#]** key yet, press the **[Clear]** key and enter a new value.
- If you have already pressed the **[#]** key, select the specified key and enter the a value.

5. Enter the horizontal copy paper size with the **[Number]** keys, then press the **[#]** key.
6. Enter the vertical original size with the **[Number]** keys, then press the **[#]** key.
7. Enter the vertical copy paper size with the **[Number]** keys, then press the **[#]** key.



8. Set your originals, then press the **[Start]** key.

Poster Mode—Enlarging the Complete Image onto Several Sheets

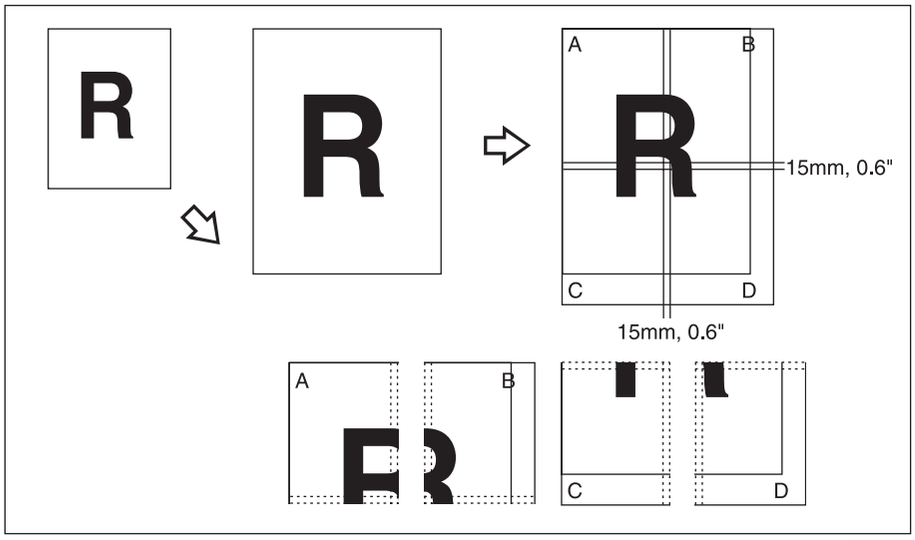


GCKREN1E

You can enlarge the complete image of originals onto several sheets. This function is convenient for making posters.

Note

❒ In this function, the copies are delivered with margins around the copy image (about 15mm, 0.6"). If you want to paste the sheets to make a poster (one large sheet), cut the margins out.



GCKREN2E

❒ You can specify different ratios or numbers of pages in the horizontal and vertical directions.

Limitation

❒ If the **[Auto Paper Select]** key is selected, you cannot use this function.

❒ You cannot use the document feeder for Poster Mode. Set your originals on the exposure glass.

❒ When you use the non-standard size originals for Poster Mode, blank pages will be fed out.

Using the [Number of Pages] key

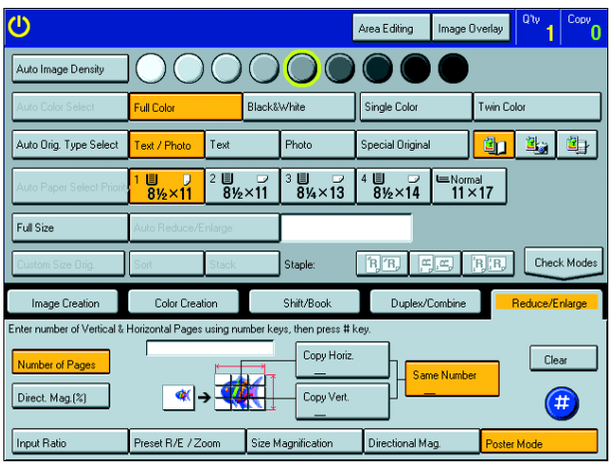
By entering the desired number of pages, the machine automatically calculates the suitable enlargement ratio for copying.

1. Select the copy paper size.
2. Press the **[Reduce/Enlarge]** key.
3. Press the **[Poster Mode]** key.

Note

❒ If you are using Auto Color Select mode and then choose Poster Mode, the machine switches automatically to Full Color mode.

4. Make sure that the **[Number of Pages]** key is selected.
5. Enter the number of pages.



Note

❒ Up to 20 pages can be entered.

❒ You can specify different ratios or numbers of pages in the horizontal and vertical directions.

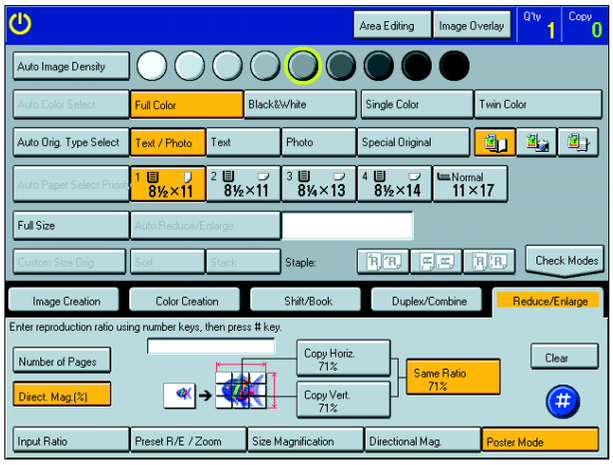
❒ If the number of pages coincides with an enlargement of more than 400%, blank pages will be fed out.

6. Press the **[#]** key.
7. Set your originals, press the **[Start]** key.

Using the [Direct. Mag. (%)] key

By entering the desired enlargement ratio, the machine automatically calculates the necessary number of copy pages.

1. Select the copy paper size.
2. Press the **[Reduce/Enlarge]** key.
3. Press the **[Poster Mode]** key.
4. Press the **[Direct. Mag. (%)]** key.
5. Enter the ratio.



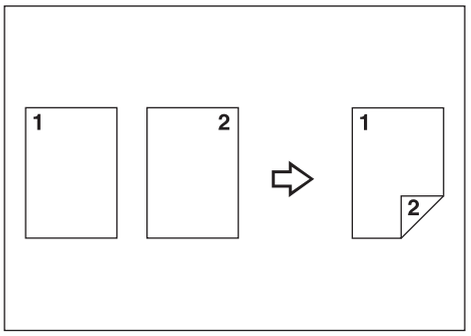
Note

- ❒ You can specify different ratios or numbers or pages in the horizontal and vertical directions.

6. Press the **[#]** key.
7. Set your originals, then press the **[Start]** key.

Duplex—Making 2 Sided Copies

1 Sided → 2 Sided—Making Two-sided Copies from One-sided Originals



GCARYO1E

This function makes 2 one-sided originals onto two-sided copy.

Limitation

❒ You cannot use the following copy paper in this function:

- Paper smaller than A5, 5 1/2" × 8 1/2"
- Translucent paper
- Adhesive labels
- OHP transparencies

Note

❒ The following paper limitations apply:

Metric version

	Single color	Full color
Paper weight	64 - 105g/m^2	
Copy Number Input	smaller than B4: 50 sheets	A3 - A5: 20 sheets
	A3: 30 sheets	

Inch version

	Single color	Full color
Paper weight	17 - 28 lb	
Copy Number Input	smaller than 8 1/2" × 14": 50 sheets	11" × 17" - 5 1/2" × 8 1/2": 20 sheets
	11" × 17": 30 sheets	

Note

❒ The image on the back-side of copies is shifted by just the binding margin.

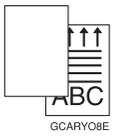
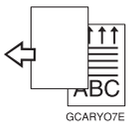
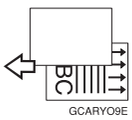
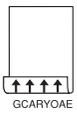
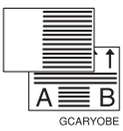
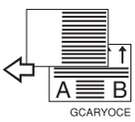
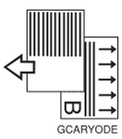
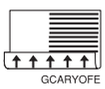
❒ You can change the width and position of the binding area.

❒ You can change the default binding margin and width.

Reference

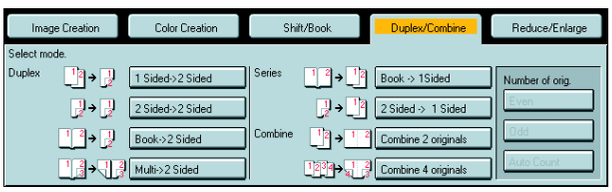
For functions that cannot be used together with this function, ☛ see page 106.

The resulting copy image will differ according to the direction in which you set your original (lengthwise or widthwise).

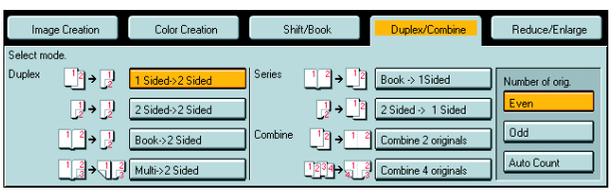
Originals	Orientation	Result*1
 GCARYO8E	 GCARYO7E	 GCARYO6E
	 GCARYO9E	 GCARYOAE
 GCARYOBE	 GCARYOCE	 GCARYOEE
	 GCARYODE	 GCARYOFE

*1 The illustrations show the directions of copied images on the front and back, not the directions of delivery.

1 Press the **[Duplex/Combine]** key.



2 Press the **[1 Sided → 2 Sided]** key.



3 Press the **[Even]** key or the **[Odd]** key according to the number of your originals.

Note

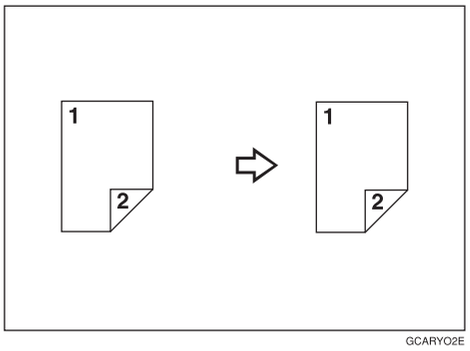
- When you set the odd originals, back side of the last page is blank.
- If you don't know the total number of originals, press the **[Auto Count]** key, then press the **[Start Count]** key.

The optional document feeder is required to use Auto Count function.

4 Press the **[OK]** key.

5 Set your originals in the document feeder, then press the **[Start]** key.

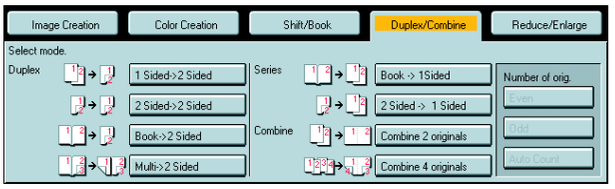
2 Sided → 2 Sided—Making Two-sided Copies from Two-sided Originals



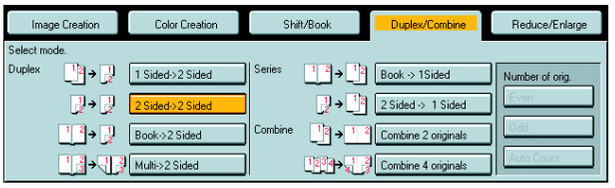
GCARYO2E

This function makes two-sided originals onto 2-sided copy.

1 Press the **[Duplex/Combine]** key.

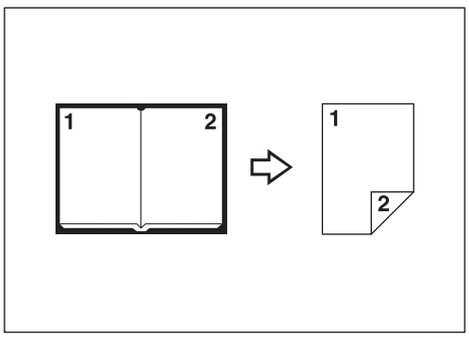


2 Press the **[2 Sided → 2 Sided]** key.



3 Set your originals in the document feeder, then press the **[Start]** key.

Book → 2 Sided—Making Two-Sided Copies from Facing Pages of a Bound Original



Use this feature to copy facing pages of a book or magazine onto both sides of the copy paper.

Note

❒ Select the lengthwise copy paper.

❒ Refer to the following table when you select original and copy paper sizes with 100% ratio:

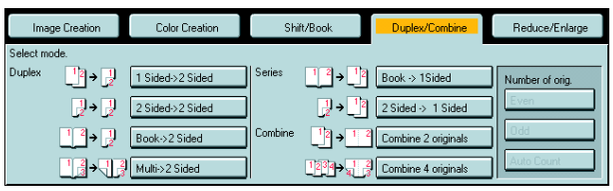
Metric version

Original	Copy Paper
A3	A4 (2-sided)
B4	B5 (2-sided)
A4	A5 (2-sided)

Inch version

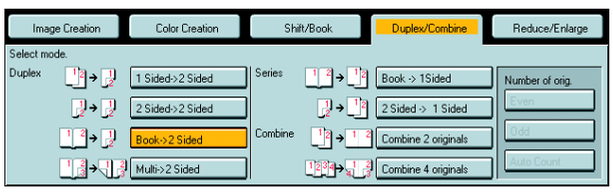
Original	Copy Paper
11" × 17"	8 1/2" × 11" (2-sided)
8 1/2" × 11"	5 1/2" × 8 1/2" (2-sided)

1 Press the **[Duplex/Combine]** key.



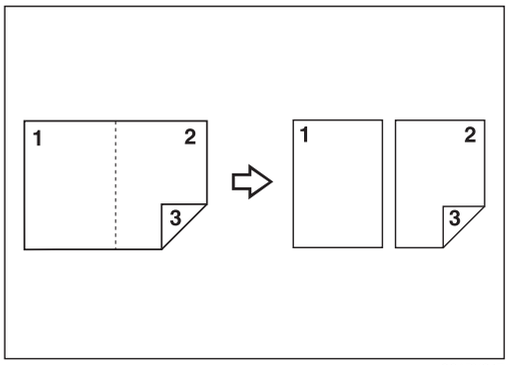
2 Select the lengthwise copy paper.

3 Press the **[Book → 2 Sided]** key.



4 Set your original on the exposure glass, then press the **[Start]** key.

Multi → 2 Sided—Making Two-sided Copies from a Book



GCARYO4E

This function copies three sides of a pamphlet to one single-sided copy and one double-sided copy.

Note

❒ Refer to the following table when you select original and copy paper sizes with 100% ratio:

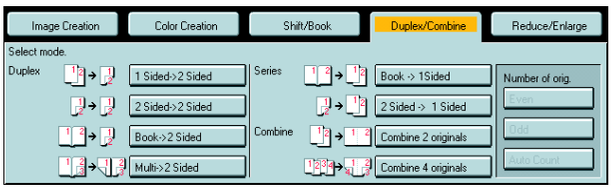
Metric version

Original	Copy Paper
A3 ▭	A4 ▯ (2-sided)
B4 ▭	B5 ▯ (2-sided)
A4 ▭	A5 ▯ (2-sided)

Inch version

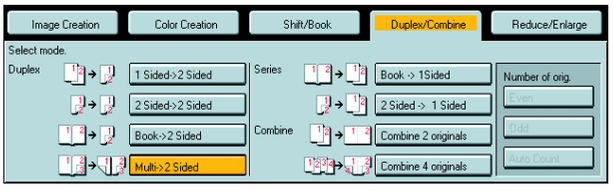
Original	Copy Paper
11" × 17" ▭	8 1/2" × 11" ▯ (2-sided)
8 1/2" × 11" ▭	5 1/2" × 8 1/2" ▯ (2-sided)

1 Press the **[Duplex/Combine]** key.



2 Select the lengthwise ▯ copy paper.

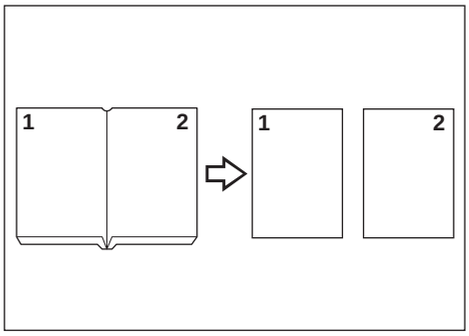
3 Press the **[Multi → 2 Sided]** key.



4 Set your originals in the document feeder, then press the **[Start]** key.

Series Copies—Making Single Copies

Book → 1 Sided—From Book Originals to 2 One-sided Copies



This function makes one-sided copies from two facing pages of bound (book) originals.

Reference

For functions that cannot be used together with this function, ☛ see page 106.

Note

❒ Refer to the following table when you select original and copy paper sizes with 100% ratio:

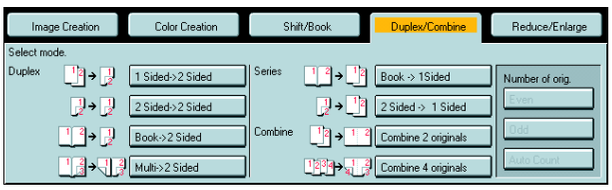
Metric version

Original	Copy Paper
A3 ▭	A4 ▯ × 2 sheets
B4 ▭	B5 ▯ × 2 sheets
A4 ▭	A5 ▯ × 2 sheets

Inch version

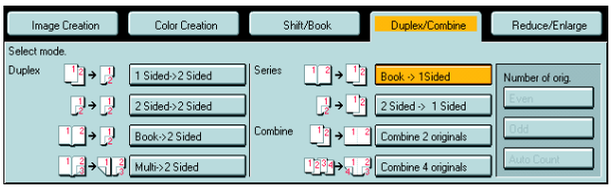
Original	Copy Paper
11" × 17" ▭	8 1/2" × 11" ▯ × 2 sheets
8 1/2" × 11" ▭	5 1/2" × 8 1/2" ▯ × 2 sheets

1 Press the **[Duplex/Combine]** key.



2 Select the lengthwise ▯ copy paper.

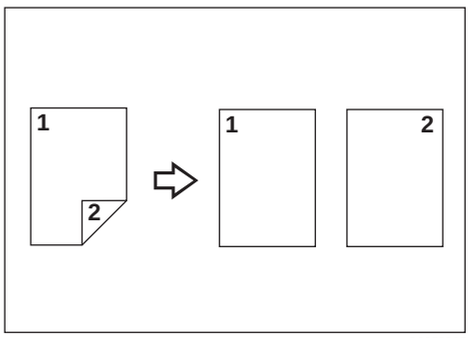
3 Press the **[Book → 1 Sided]** key.



4 Set your originals, then press the **[Start]** key.

2 Sided → 1 Sided—From Two-sided Originals to 2 One-sided Copies

The optional document feeder is required to use this function.

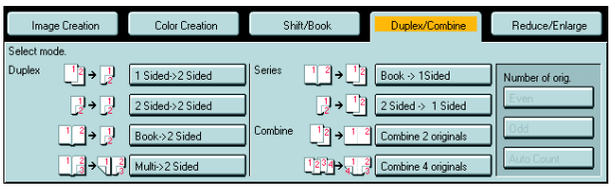


GCSEPR2E

Reference

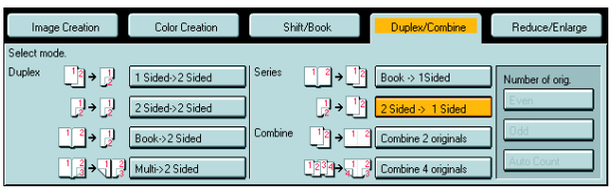
For functions that cannot be used together with this function, ☛ see page 106.

1 Press the **[Duplex/Combine]** key.



2 Select the lengthwise copy paper.

3 Press the **[2 Sided → 1 Sided]** key.

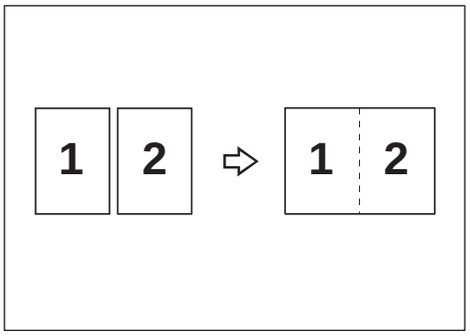


4 Set your originals in the document feeder, then press the **[Start]** key.

Combine

Combine 2 Originals—Combining 2 Originals

The optional document feeder is required to use this function.



GCSYYK1E

This function automatically combines 2 one-sided originals onto one copy.

Note

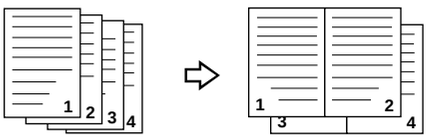
❒ The machine cannot copy originals different in size and direction.

Reference

For functions that cannot be used together with this function, ☛ see page 106.

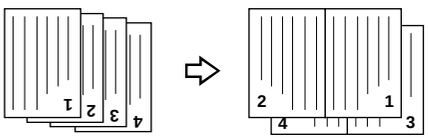
Setting Originals (Originals set in the document feeder)

- Originals reading from left to right



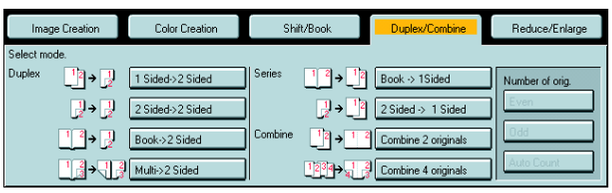
Combine5

- Originals reading from top to bottom



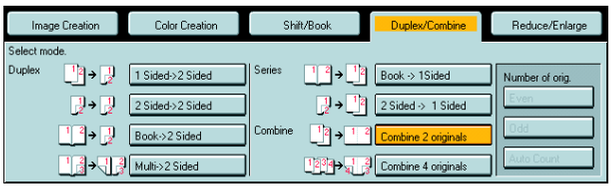
Combine6

1 Press the **[Duplex/Combine]** key.



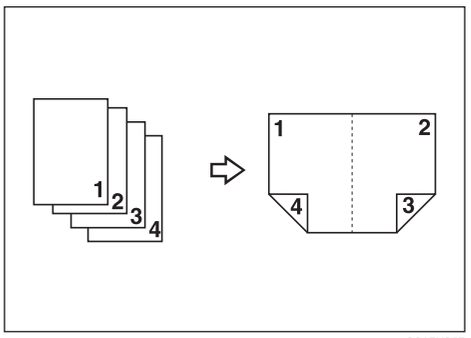
2 Select the widthwise ▭ copy paper.

3 Press the **[Combine 2 originals]** key.



4 Set your originals in the document feeder, then press the **[Start]** key.

Combine 4 Originals—Combining 4 Originals

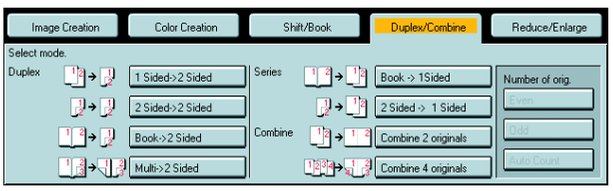


GCARYO5E

Reference

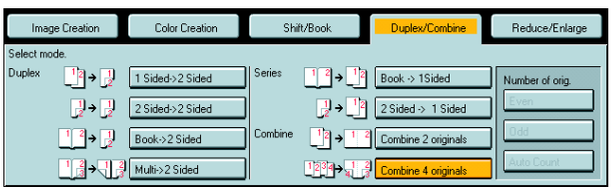
For functions that cannot be used together with this function, see page 106.

1 Press the **[Duplex/Combine]** key.



2 Select the widthwise ▭ copy paper.

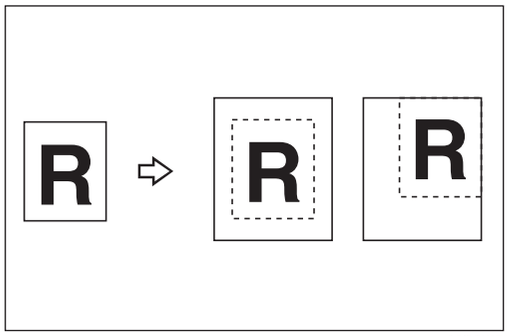
3 Press the **[Combine 4 originals]** key.



4 Set your originals in the document feeder, then press the **[Start]** key.

Shift—Shifting the Image

Shift—Centering/Cornering the Image



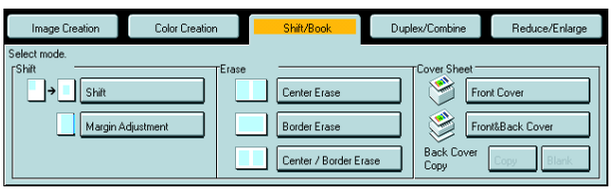
GCIDOH3E

You can move the image to a corner or edge as well as center it. This function is useful when the copy paper is larger than the original.

Note

❒ You cannot use 12" × 18", 13" × 19" size copy paper for this function.

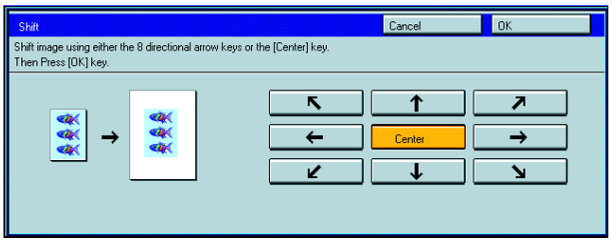
1. Press the **[Shift/Book]** key.
2. Press the **[Shift]** key.



3. Select the direction in which you want to shift the image.

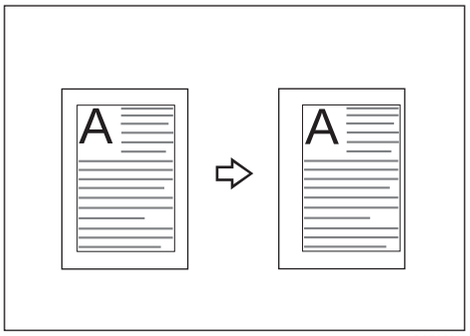
Note

❒ When you want to center the image, press the **[Center]** key.



4. Press the **[OK]** key.
5. Select the copy paper size.
6. Set your originals, then press the **[Start]** key.

Margin Adjustment—Adding Margins for Binding



GCTOJS1E

You can make a margin by shifting the image to the left or right. This function is useful when you want to bind copies.

Note

❒ You can change the width of the binding margin as follows:

Metric Version	0 - 20mm (in 1mm steps)
Inch Version	0" - 0.8"mm (in 0.1" steps)

❒ The margin width default is as follows. You can change this default setting with the user tools. ☛ See page 195.

Metric Version	• Front: 0mm Left • Back: 0mm Right
Inch Version	• Front: 0" Left • Back: 0" Right

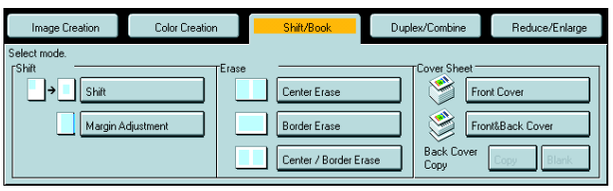
❒ If you set too wide a margin, areas you do not want to delete might be erased.

Reference

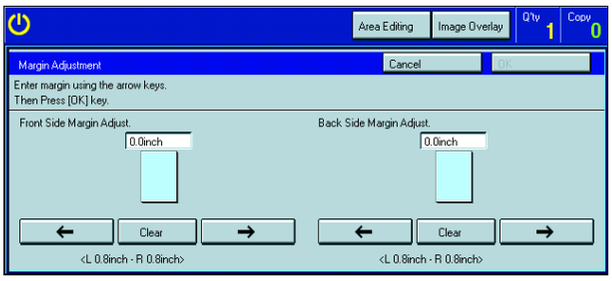
For functions that cannot be used together with this function, ☛ see page 106.

1 Press the **[Shift/Book]** key.

2 Press the **[Margin Adjustment]** key.



3 Set the margins on the front side and back side of copy paper.



Note

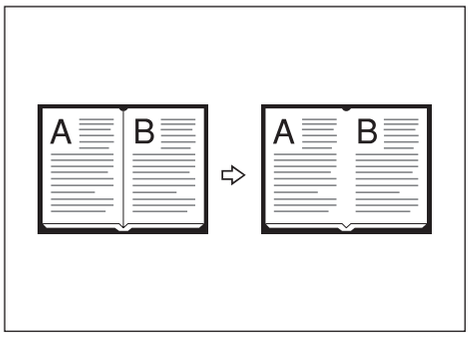
- To change the value entered, press the **[Clear]** key and enter a new value.
- To make a left margin, press the **[→]** key until the number displayed reaches the required setting.
- To make a right margin, press the **[←]** key until the number displayed reaches the required setting.

4 Press the **[OK]** key.

5 Set your originals, then press the **[Start]** key.

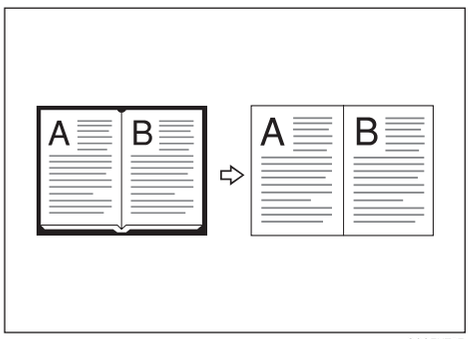
Erase—Erasing Parts of the Copy Image

Center Erase—Erasing the Center Margin of the Original Image



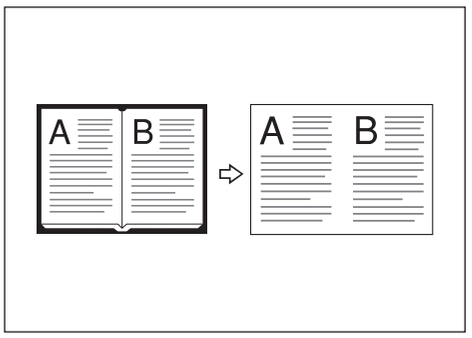
GCCENT1E

Border Erase—Erasing the Surrounding Area of the Original Image



GCCENT2E

Center/Border Erase—Erasing the Center Margin and Surrounding Area of the Original Image



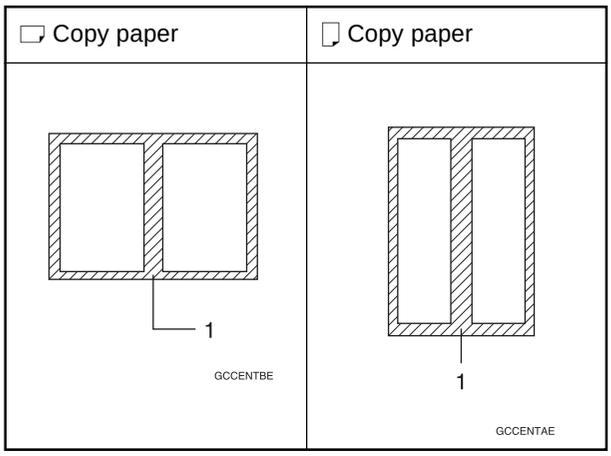
GCCENT3E

Reference

For functions that cannot be used together with these functions, see page 106.

Note

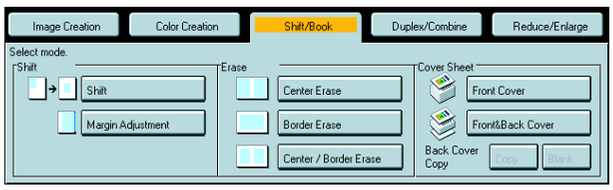
❒ The position of the margin to be erased is determined according to the original size and reproduction ratio.



1:Erased part

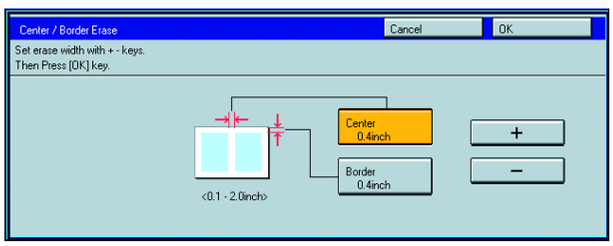
1. Press the **[Shift/Book]** key.

2. Press the **[Center Erase]**, **[Border Erase]**, or **[Center/Border Erase]** key.



3. Adjust the width of the margin to be erased by pressing the **[+]** or **[–]** key.

❒ You can adjust the width in the range of 3 ~ 50mm, 0.1" ~ 2.0".



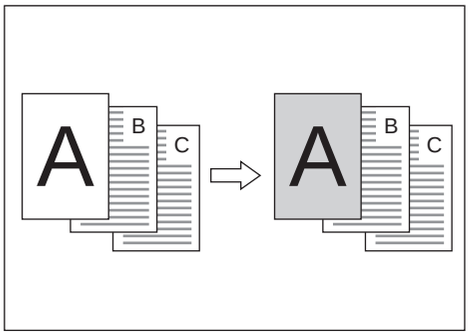
4. Press the **[OK]** key.

5. Set your originals, then press the **[Start]** key.

Cover Sheet—Adding or Inserting Sheets

Front Cover—Copying a Front Cover

The optional document feeder is required to use this function.



GCHYOS1E

Note

❒ The cover sheets should be identical in size and direction with the copy paper.

❒ The cover sheets should be fed from the bypass tray.

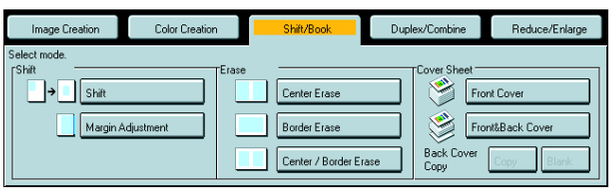
❒ The covers are copied in Thick mode.

Reference

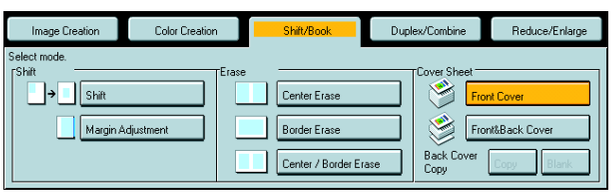
For functions that cannot be used together with this function, ☛ see page 106.

When you use Front Cover mode with 1 Sided → 1 Sided mode

1. Press the **[Shift/Book]** key.



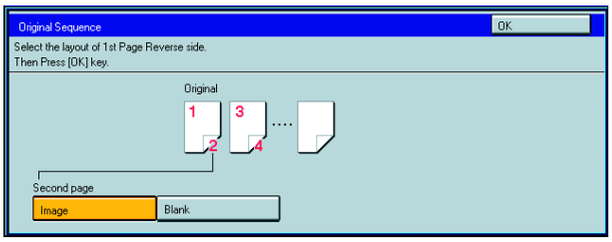
2. Press the **[Front Cover]** key.



3. Set your originals in the document feeder, then press the **[Start]** key.

When you use Front Cover mode with 2 Sided → 1 Sided or 2 Sided → 2 Sided mode

1. Enter 2 Sided→1 Sided or 2 Sided→2 Sided mode. ☛ See page 70 or 74.
2. Follow the steps 1 to 2 on page 82.
3. Select **[Image]** or **[Blank]** key depending on the reverse side of first original has an image or not.

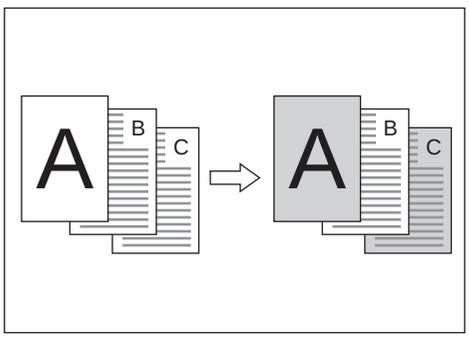


4. Press the **[OK]** key.
5. Set your originals in the document feeder, then press the **[Start]** key.

Front & Back Cover—Copying or Adding Front and Back Covers

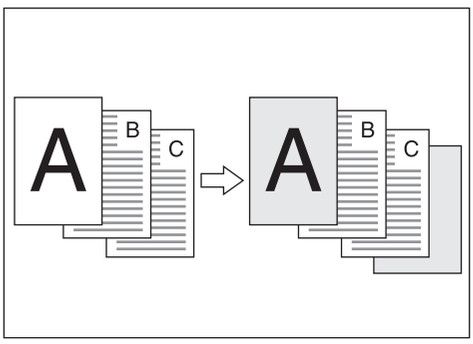
The optional document feeder is required to use this function.

<Back Cover: Copy>



GCHYOS3E

<Back Cover: Blank>



GCHYOS2E

Note

❒ You can specify whether to make a copy on a front cover sheet. If you select **[Copy]**, the last pages will be copied on the back cover sheets. If you select **[Blank]**, a cover sheet will just be inserted after the last copy.

❒ The cover sheets should be identical in size and direction to the copy paper.

❒ The cover sheets should be fed from the bypass tray.

❒ The covers are copied in Thick mode.

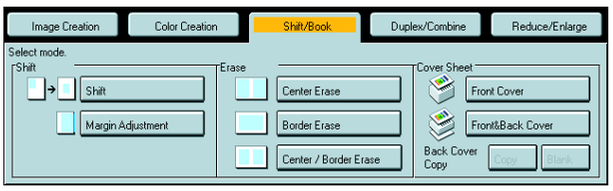
❒ If Blank Cover mode is selected, the back cover will not be counted as a copy.

Reference

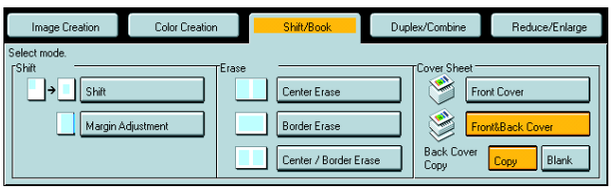
For functions that cannot be used together with this function, ☛ see page 106.

When you use Front & Back covers mode with 1 Sided → 1 Sided mode

1 Press the **[Shift/Book]** key.



2 Press the **[Front & Back Cover]** key.



3 Select the **[Copy]** or **[Blank]** key to choose whether to copy onto the back cover.

4 Set your originals in the document feeder.

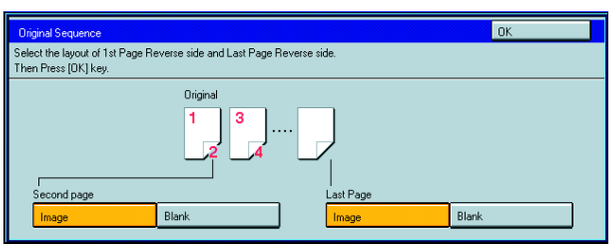
5 Press the **[Start]** key.

When you use Front & Back Cover mode with 2 Sided → 1 Sided or 2 Sided → 2 Sided mode

1 Enter 2 Sided→1 Sided or 2 Sided→2 Sided mode. ☛ See page 70 or 74.

2 Follow the steps 1 to 3 on above.

3 Select **[Image]** or **[Blank]** key depending on the reverse side of first original has an image or not.



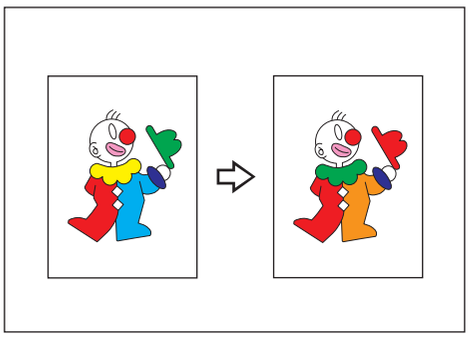
4 Select **[Image]** or **[Blank]** key depending on the reverse side of last original has an image or not.

5 Press the **[OK]** key.

6 Follow the steps 4 and 5.

Color Creation

Color Conversion—Converting a Selected Color into a Different Color


GCCLPRAE

This function converts a selected color of an original into a different color on the copy.

Reference

For copy samples, ☛ see page 17.

Note

❒ Up to 4 colors can be converted at one time.

❒ Colors you can convert to:

Yellow, Red, Magenta, Green, Cyan, Blue, Black, White, and Scanned Color (only one Scanned Color can be selected at a time)

❒ Colors that can be used after conversion:

Yellow, Orange, Red, Magenta, Green, Cyan, Blue, Yellow Green, Black, White, Beige, Pink, Marine Blue, Purple, User colors, and Scanned Color

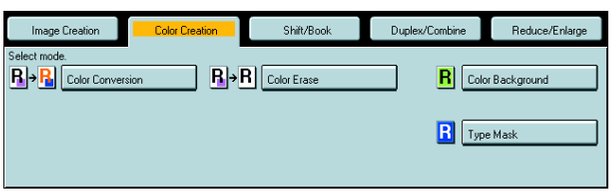
❒ This function can be made more or less sensitive to the color to be converted. It can be adjusted within five levels from "Narrow" to "Wide". ☛ See page 197.
For example, if red is selected as the color to be converted, "Narrow" will result in only red being converted, and "Wide" will result in other colors close to red being converted.

❒ This function can be used in Full Color mode.

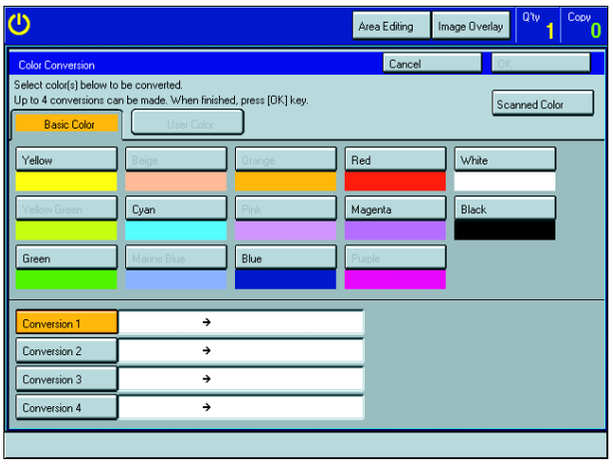
❒ When using Color Conversion and Color Erase together, you can only choose Scanned Color for one of these functions only.

1 Press the **[Color Creation]** key.

2 Press the **[Color Conversion]** key.



3 Select the original color (color to be converted).



4 Select the new color (color to convert to).

5 If you want to convert more than one color, repeat steps 3 and 4.

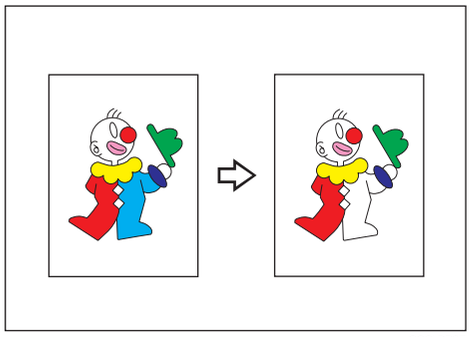
Note

❒ If you pick the wrong color, press the **[Clear]** key.

6 Press the **[OK]** key.

7 Set your originals, then press the **[Start]** key.

Color Erase—Erasing the Selected Color



GCCLPR2E

This function erases a selected color from the original image.

Reference

For copy samples, ☛ see page 17.

Note

❒ Up to 4 colors can be erased at one time.

❒ Colors that can be erased:

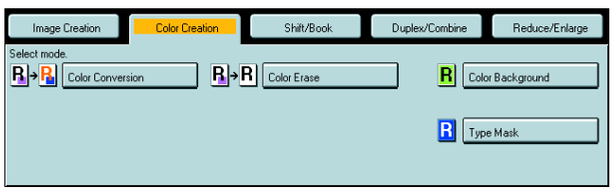
Yellow, Red, Magenta, Green, Cyan, Blue, Black, and Scanned Color (only one Scanned Color can be selected at a time)

❒ This function can be made more or less sensitive to the color to be erased. It can be adjusted within five levels from “Narrow” to “Wide”. ☛ See page 197.
For example, if red is selected as the color to be converted, “Narrow” will result in only red being erased, and “Wide” will result in other colors close to red being erased.

❒ When using Color Erase and Color Conversion together, you can only choose Scanned Color for one of these functions only.

1 Press the **[Color Creation]** key.

2 Press the **[Color Erase]** key.



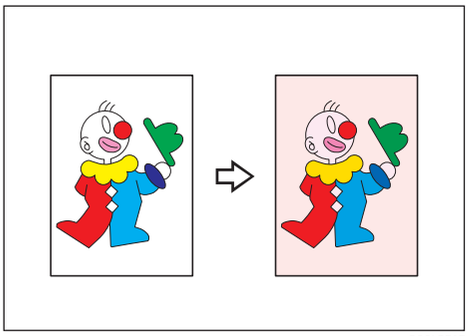
3 Select the color to be erased.



4 Press the **[OK]** key

5 Set your originals, then press the **[Start]** key.

Color Background—Making Copy with Color Background



GCCLPR3E

This function makes copies with a selected color background.

Reference

For copy samples, ☛ see page 17.

Note

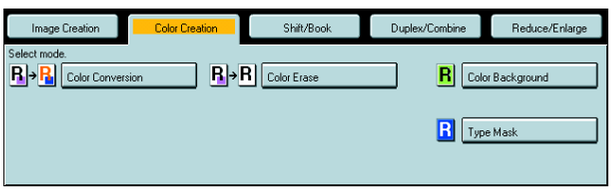
❒ Colors that can be selected as a background color:

Yellow, Orange, Red, Magenta, Green, Cyan, Blue, Yellow Green, Black, Beige, Pink, Marine Blue, Purple, Scanned Color, and User Colors

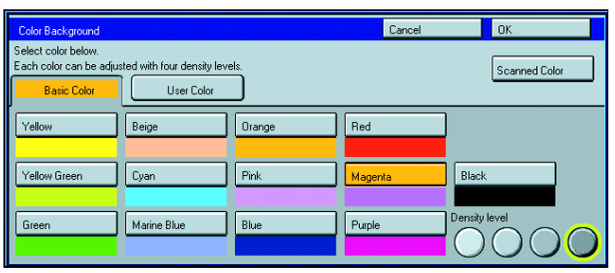
❒ In this mode, color tones of photo or picture in originals might be changed due to the color on the background.

1 Press the **[Color Creation]** key.

2 Press the **[Color Background]** key.



3 Select the color for background.



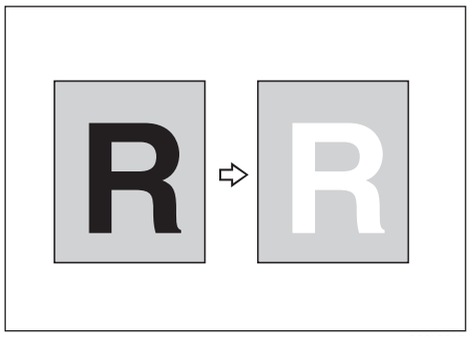
Note

❒ You can select the color density level.

4 Press the **[OK]** key.

5 Set your originals, then press the **[Start]** key.

Type Mask—Coloring Text Part and Background Part Separately



GCCLPR4E

This function copies coloring text part and background part separately.

Reference

For copy samples, ☛ see 17.

Note

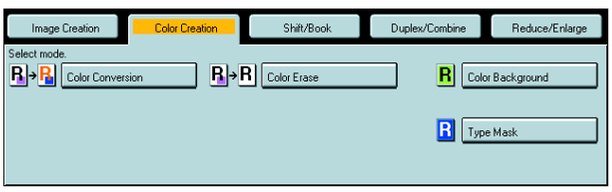
❒ When the machine is not able to differentiate between the color of text/images and the background, the background is copied using the specified text color.

❒ Colors that can be selected as a Text (image) and background color:

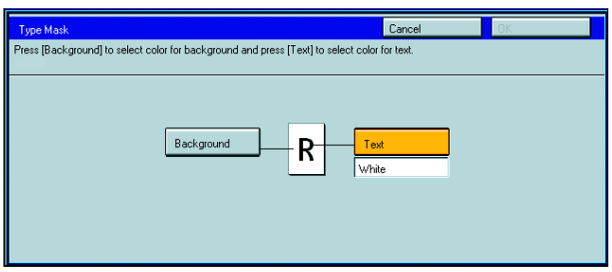
Yellow, Magenta, Cyan, Green, Red, Blue, Yellow Green, Orange, Marine Blue, Beige, Pink, Purple, Black, White, Scanned Color, and User Colors

1 Press the **[Color Creation]** key.

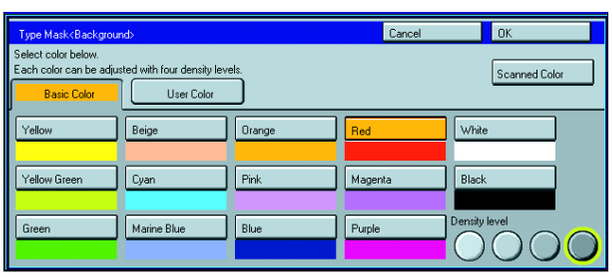
2 Press the **[Type Mask]** key.



3 Press the **[Background]** key.



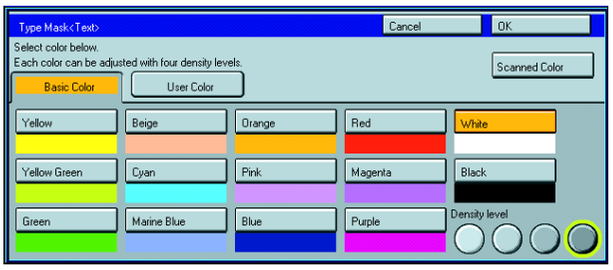
4 Select the color for the background, then press the **[OK]** key.



Note

❒ You can select the color density level.

5 Press the **[Text]** key and select the color for the Text.



Note

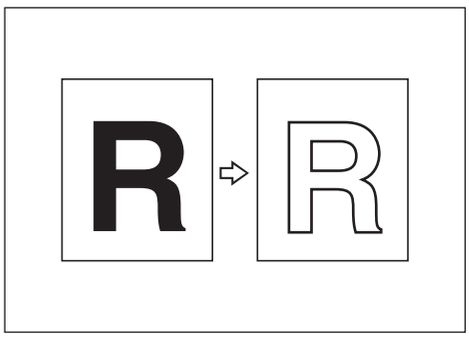
❒ You can select the color density level.

6 Press the **[OK]** key.

7 Set your originals, then press the **[Start]** key.

Image Creation

Outline Image—Copying only the Outline of the Image



GCNAKA1E

This function copies only the outline of the image.

Note

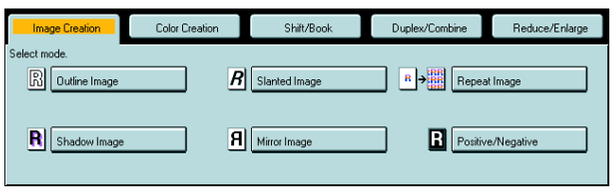
❒ This function is copied in Auto Image Density and Text/Photo mode.

❒ Colors that can be selected as an outline color:

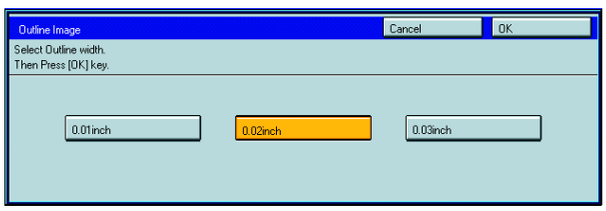
Yellow, Orange, Red, Magenta, Green, Cyan, Blue, Yellow Green, Black, Beige, Pink, Marine Blue, Purple, Scanned Color, and User Colors.

1. Press the **[Image Creation]** key.

2. Press the **[Outline Image]** key.



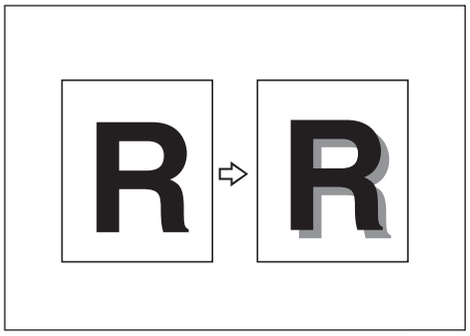
3. Select the width of the outline.



4. Press the **[OK]** key.

5. Set your originals, then press the **[Start]** key.

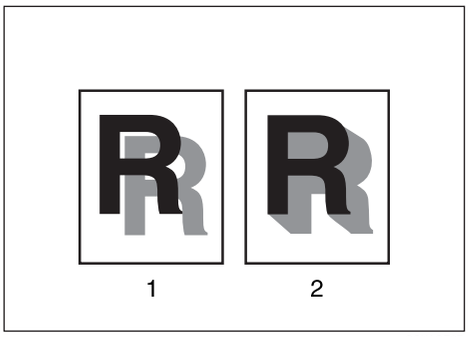
Shadow Image—Adding a Shadow around the Copy Image Elements



GCKAGE1E

This function adds a shadow around the edges of copy image elements.

❒ You can select block shadow or offset shadow.

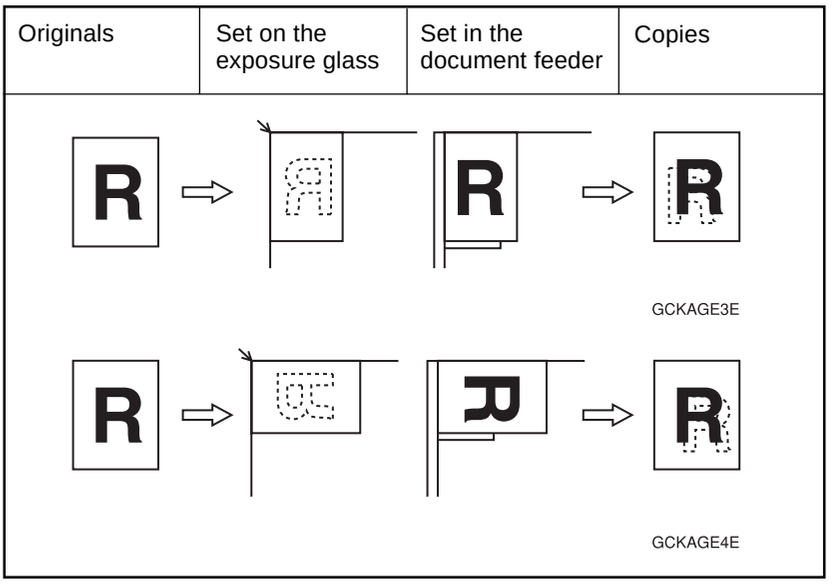


GCKAGE2E

1: Offset
2: Block

❒ The orientation of the original decides the position of the shadow as follows:

Originals	Set on the exposure glass	Set in the document feeder	Copies



Note

❒ You can select the color of shadow as follows:

Same Color: A shadow of the same color as the original is added.

Select Color: You can select the color of the shadow.

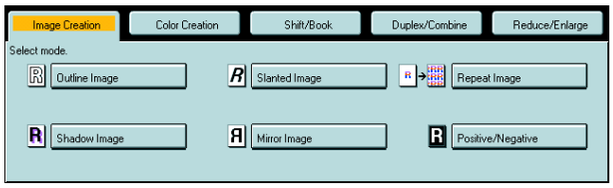
❒ Shadow widths:

Metric version: 1mm, 2mm, 3mm, 4mm

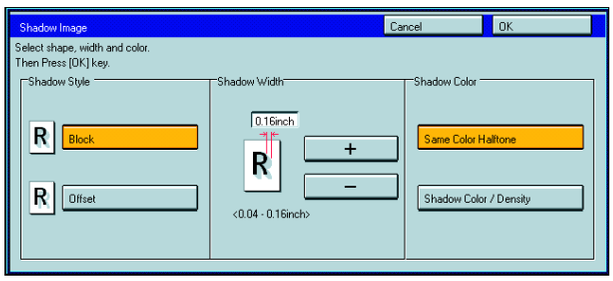
Inch version: 0.04", 0.08", 0.12", 0.16"

Same color shadow

1. Press the **[Image Creation]** key.
2. Press the **[Shadow Image]** key.



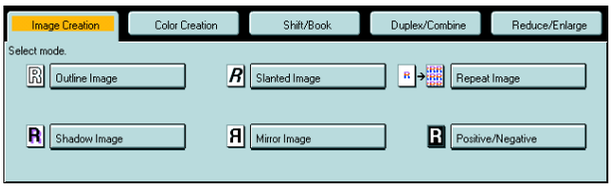
3. Press the **[Block]** or **[Offset]** key.



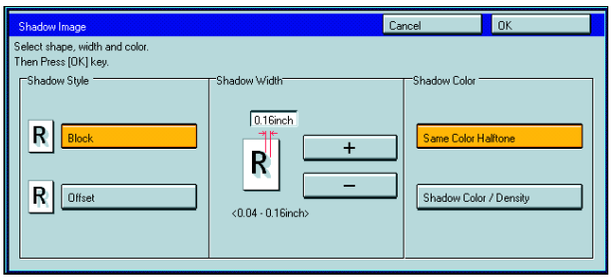
4. Adjust the width by pressing the **[+]** or **[–]** key.
5. Make sure the **[Same Color Halftone]** key is selected.
6. Press the **[OK]** key.
7. Set your originals, then press the **[Start]** key.

Select color shadow

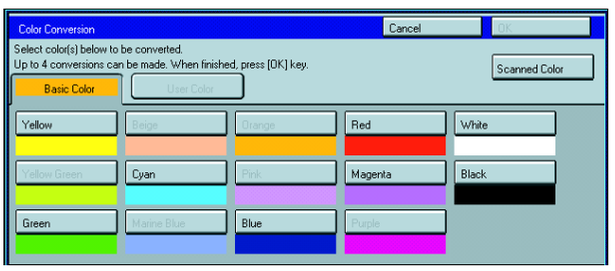
1. Press the **[Image Creation]** key.
2. Press the **[Shadow Image]** key.



3. Press the **[Block]** or **[Offset]** key.
4. Adjust the width by pressing the **[+]** or **[–]** key.
5. Press the **[Shadow Color/Density]** key.



6. Select the color, then press the **[OK]** key.

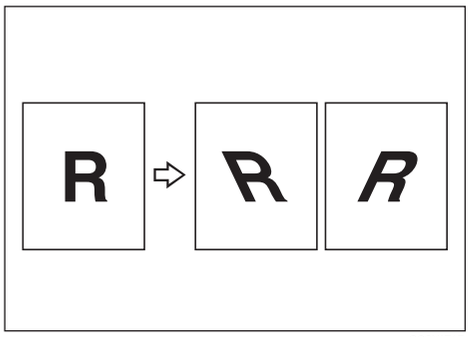


Note

❒ You can select the color density level.

7. Press the **[OK]** key.
8. Set your originals, then press the **[Start]** key.

Slanted Image—Slanting the Copy Image

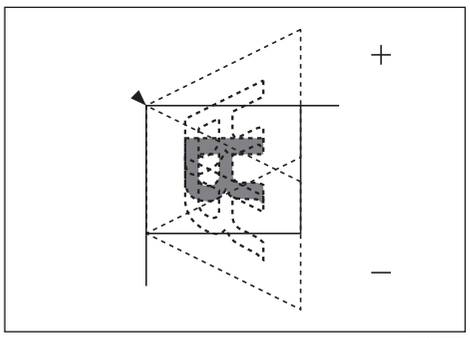


GCSYAT1E

This function slants the copy image at a selected angle.

Note

❒ The slant direction is decided as shown in the illustration.



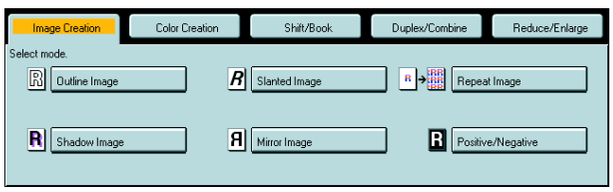
GCSYAT2E

❒ You can select the angle from –45° to +45°.

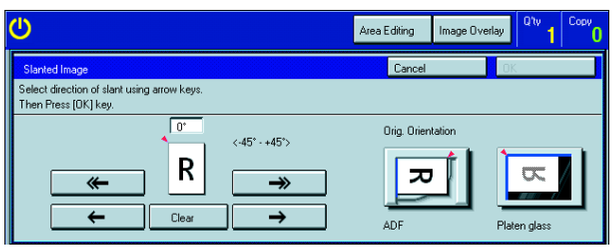
❒ Depending on the angle, some parts of the image may be lost.

1 Press the **[Image Creation]** key.

2 Press the **[Slanted Image]** key.



3 Adjust the angle by pressing the arrow keys.



Note

❒ By pressing the **[⇐]** or **[⇒]** key, the number of the angle can be adjusted by in steps of 5°.

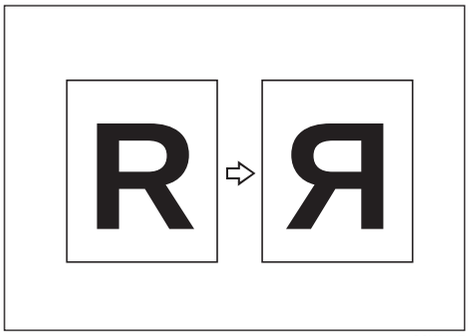
❒ By pressing the **[←]** or **[→]** key, the number of the angle can be adjusted by in steps of 1°.

❒ To cancel the angle, press the **[Clear]** key.

4 Press the **[OK]** key.

5 Set your originals, then press the **[Start]** key.

Mirror Image—Making a Mirror Image

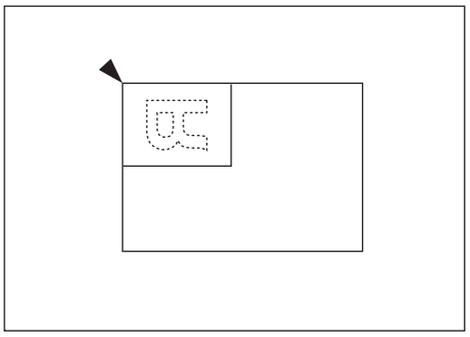


GCMILL1E

This function makes a mirror image copy of the original.

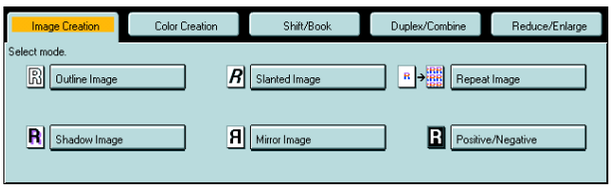
Note

❒ Set the original as below when setting on the exposure glass (platen glass).

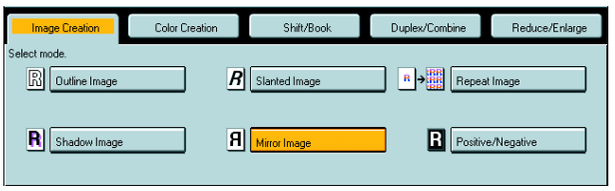


GCMILL2E

1. Press the **[Image Creation]** key.

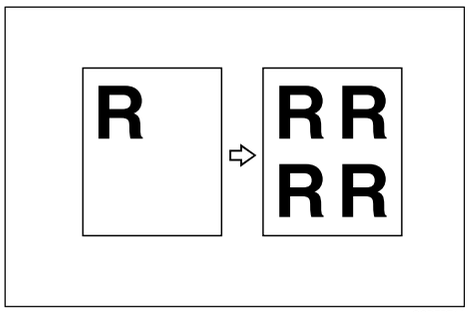


2. Press the **[Mirror Image]** key.



3. Set your originals, then press the **[Start]** key.

Repeat Image—Copying a Part of an Original Image Repeatedly



GCREPT1J

This function copies a part of the original image repeatedly.

Note

❒ When this function is used, the leading edge margin of 10mm, 0.4" is set on the copy paper.

❒ There are three ways to specify the image of the original to be repeated as follows:

Size Input:	This function allows you to reproduce the top band of an original repeatedly down the entire copy. You specify the width of the band (the vertical length of image) and it is repeated as many times as will fit on the copy.
Number of Images:	This function also allows you to reproduce the top band of an original repeatedly down the entire copy, but here you specify the number of image repetitions you want and the copier will determine the width of the top band.
Editor Area:	This function allows you to select an area of the original and reproduce it repeatedly down the copy. The repetitions are made one below the other, and are all aligned to the right. (Only for Edit type)

❒ For an explanation of entering numbers, ☛ see page 25.

❒ The number of repeated images that can be fit on a single sheet of copy paper is calculated automatically based upon the copy paper size, copy paper direction and enlargement/reduction ratio.

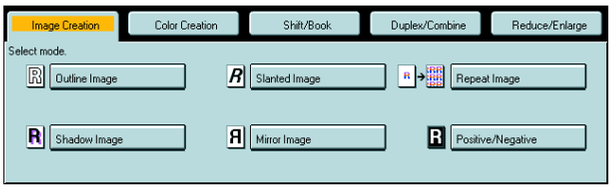
❒ Depending on the copy paper size, copy paper direction and enlargement/reduction ratio, parts of repeated images may be cut off.

❒ When using the Length key or the Editor Area key, parts of some repeated images may be cut off depending on the values you enter.

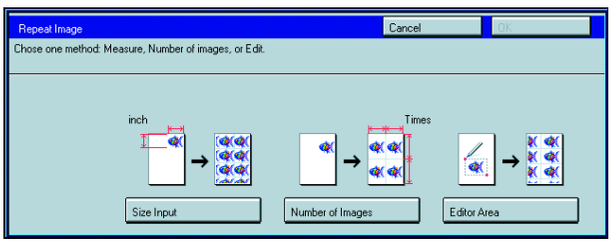
When using the [Size Input] key

1 Press the **[Image Creation]** key.

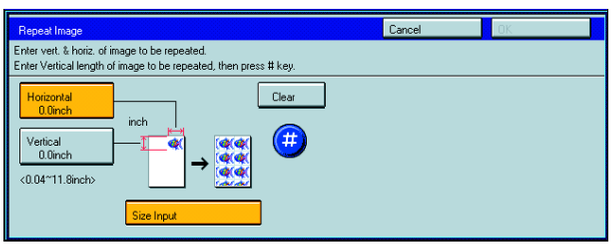
2 Press the **[Repeat Image]** key.



3 Press the **[Size Input]** key.



4 Enter the horizontal and vertical length with the **[Number]** keys then press the **[#]** key.



Note

❒ The length that you can enter is 1 ~ 300mm, 0.1" ~ 11.7". When you enter less than 5mm, 0.2", however, the image might not be repeated well.

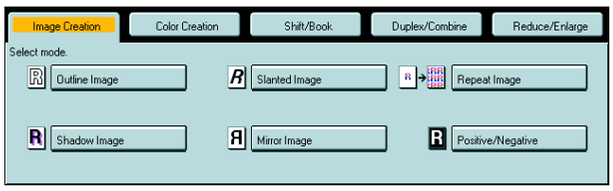
5 Press the **[OK]** key.

6 Set your originals, then press the **[Start]** key.

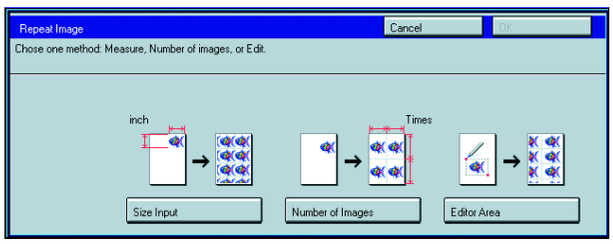
When using the [Number of Images] key

1 Press the **[Image Creation]** key.

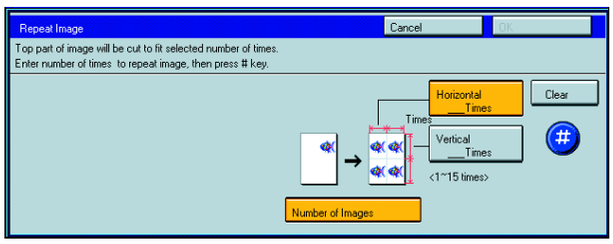
2 Press the **[Repeat Image]** key.



3 Press the **[Number of Images]** key.



4 Enter a horizontal and vertical number between 1 and 15 and press the **[#]** key.



Note

❒ If the horizontal and vertical settings are 1 × 1, you cannot press the **[#]** key.

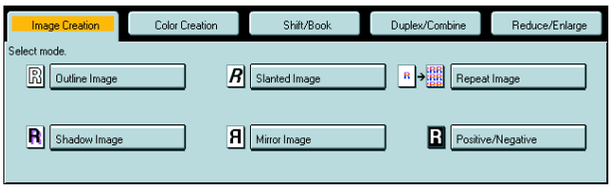
5 Press the **[OK]** key.

6 Set your originals, then press the **[Start]** key.

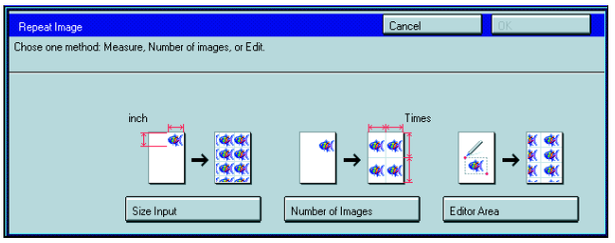
When using the [Editor Area] key (Only for Edit type)

1 Press the **[Image Creation]** key.

2 Press the **[Repeat Image]** key.



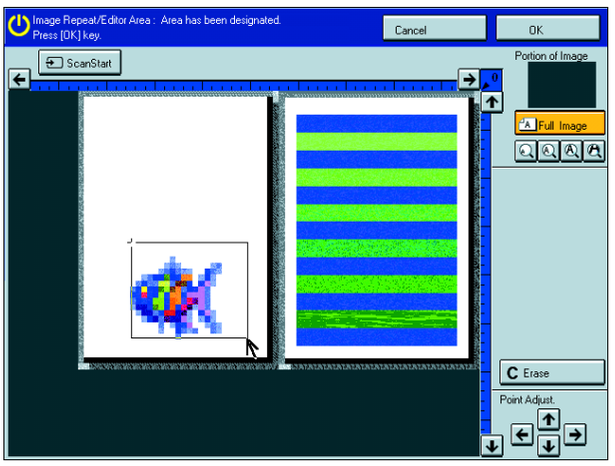
3 Set your original on the exposure glass (platen glass), then press the **[Editor Area]** key.



Limitation

- You cannot set your originals in the document feeder.

4 Mark diagonally opposite corners of area to be repeated.



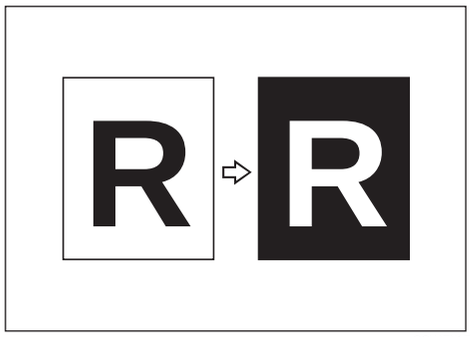
Note

- The area you have designated is scanned in.
- For details about designating the area, ☛ see page 142.

5 Press the **[OK]** key.

6 Press the **[Start]** key.

Positive/Negative—Copying in Complementary Colors



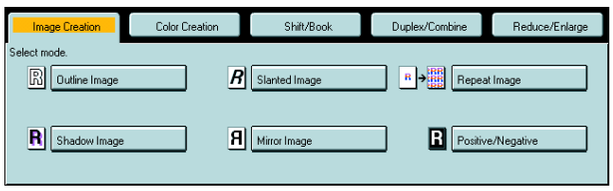
GCHATN1E

This function copies the original image in complementary colors. If you use a black and white original, black and white areas of the original are reversed.

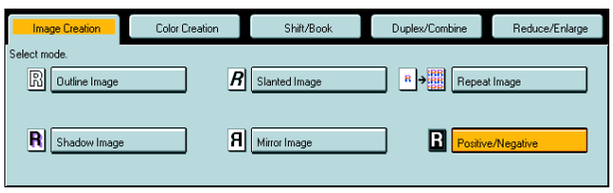
Note

❒ If you copy using twin color mode, white areas are changed to black, black areas are changed to white, and color areas are changed to the selected color.

1 Press the **[Image Creation]** key.



2 Press the **[Positive/Negative]** key.



3 Set your originals, then press the **[Start]** key.

Finishing

Note

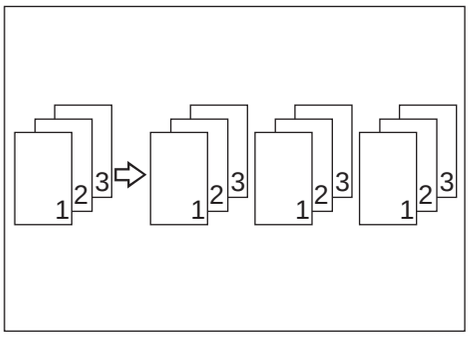
❒ To avoid problems caused by curled copies, try turning over the paper stack in the paper tray. If there is no improvement, change to copy paper with less curl.

Reference

For functions that cannot be used together with this function, ☛ see page 106.

Sort—Sorting into Sets (123, 123, 123)

The optional 20-bin sorter stapler is required to use this function.



GCSORT1E

One copy of each original is delivered to each bin and copies are collated into sets.

Note

❒ It is recommended to set originals in the document feeder with this function.

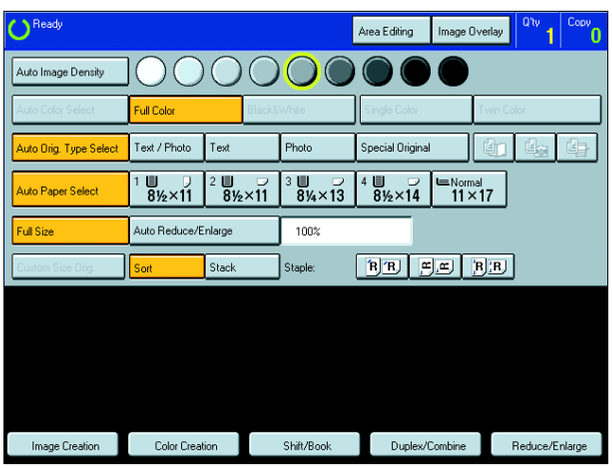
❒ For sorting, the following limitations apply:

	Normal paper mode	Thick mode	Extra Thick mode
Maximum paper size	▭: A3, 13" × 19" ▯: A4, 8 1/2" × 11"	▭: A3, 13" × 19" ▯: A4, 8 1/2" × 11"	▭: A3, 13" × 19" ▯: A4, 8 1/2" × 11"
Minimum paper size	▭: B5, 8" × 10" ▯: B5, 8 1/2" × 11"	▭: B5, 8" × 10" ▯: B5, 8 1/2" × 11"	▭: B5, 8" × 10" ▯: B5, 8 1/2" × 11"
Maximum paper capacity of bin	50 copies	30 copies	20 copies

❒ You cannot use OHP transparencies or non-standard size paper in Sort mode.

❒ You can make the machine select Sort mode automatically when you insert two or more originals in the document feeder and make two or more copies from each original with the user tools. ☛ See page 198.

1 Press the **[Sort]** key.

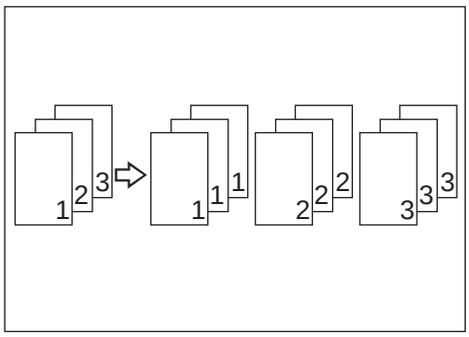


2 Set your originals in the document feeder.

3 Press the **[Start]** key.

Stack—Stacking together all Copies of a Page (111, 222, 333)

The optional 20-bin sorter stapler is required to use this function.



GCSORT2E

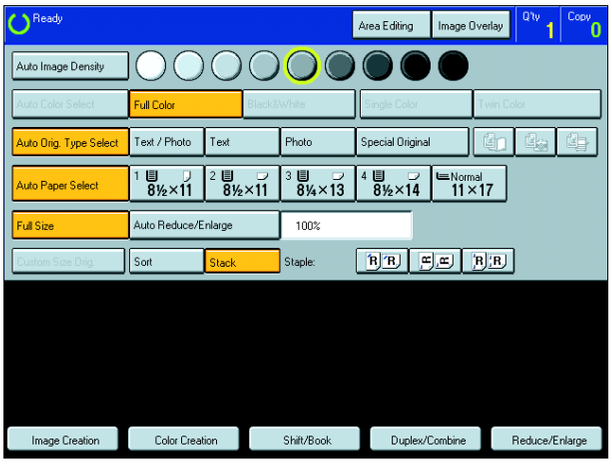
All copies of each original are delivered to the same bin.

❒ For stacking, the following limitations apply:

	Normal paper mode	Thick mode	Extra Thick mode
Maximum paper size	▭: A3, 13" × 19" ▯: A4, 8 1/2" × 11"	▭: A3, 13" × 19" ▯: A4, 8 1/2" × 11"	▭: A3, 13" × 19" ▯: A4, 8 1/2" × 11"
Minimum paper size	▭: B5, 8" × 10" ▯: B5, 8 1/2" × 11"	▭: B5, 8" × 10" ▯: B5, 8 1/2" × 11"	▭: B5, 8" × 10" ▯: B5, 8 1/2" × 11"
Maximum paper capacity of bin	50 copies	30 copies	20 copies

❒ You cannot use OHP transparencies or non-standard size paper in Stack mode.

1 Press the **[Stack]** key.

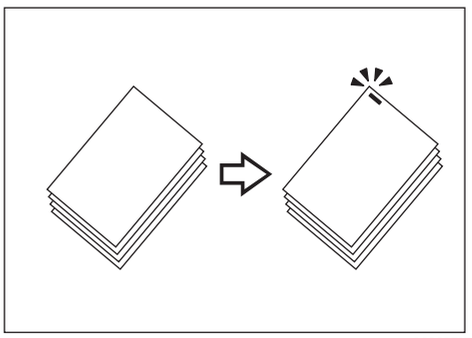


2 Set your originals in the document feeder.

3 Press the **[Start]** key.

Staple—Stapling Copies

The optional 20-bin sorter stapler is required to use this function.


GCSORT3E

Each copy set can be stapled together.

Note

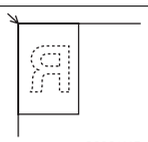
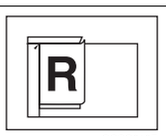
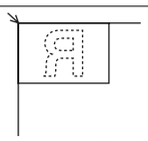
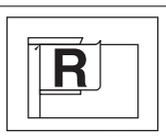
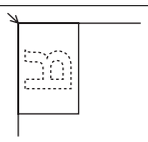
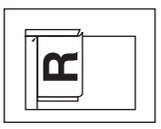
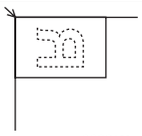
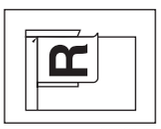
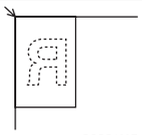
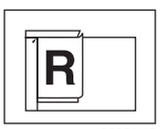
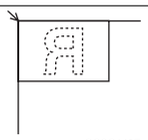
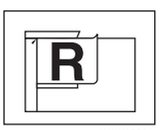
❒ When you select Staple mode, Sort mode is automatically selected.

❒ You cannot use Staple mode with Stack mode.

❒ You cannot use OHP transparencies or non-standard size paper in Staple mode.

❒ You cannot staple different widths of paper.

❒ Stapling position and original setting:

	Original setting		Stapling position
	Exposure glass	Document feeder	
Top 1	 GCSO130E	 GCSO010E	 GCSO090E
	 GCSO140E	 GCSO020E	 GCSO100E
Top 2	 GCSO150E	 GCSO030E	 GCSO070E
	 GCSO160E	 GCSO040E	 GCSO080E
Double	 GCSO130E	 GCSO010E	 GCSO110E
	 GCSO140E	 GCSO020E	 GCSO120E

❒ For stapling, the following limitations apply:

	Normal paper mode	Thick mode	Extra Thick mode
Maximum paper size	▭: A3, 13" × 19" ▯: A4, 8 1/2" × 11"	▭: A3, 13" × 19" ▯: A4, 8 1/2" × 11"	▭: A3, 13" × 19" ▯: A4, 8 1/2" × 11"
Minimum paper size	▭: B5, 8" × 10" ▯: B5, 8 1/2" × 11"	▭: B5, 8" × 10" ▯: B5, 8 1/2" × 11"	▭: B5, 8" × 10" ▯: B5, 8 1/2" × 11"
Maximum paper capacity of bin	2 - 50 copies	2 - 25 copies	2 - 10 copies

Reference

If you want to add staples, ☛ see page 179.

When the stapler is jammed, ☛ see page 181.

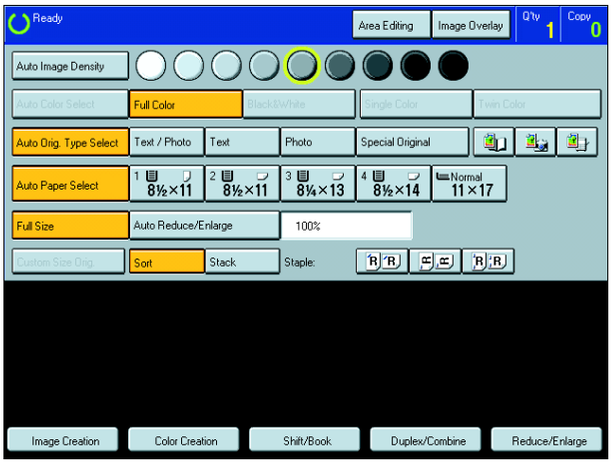
Stapling copies automatically after copying

The optional document feeder is required to use this function.

1. Select the stapling position.

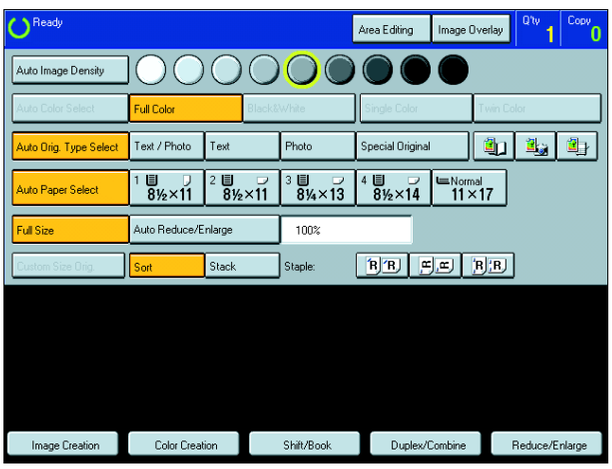
2. Set your originals in the document feeder.

3. Press the **[Start]** key.



Stapling copies manually after copying

1. After Sort mode copying is completed, select the stapling position.



Combination Chart

☆ : These modes can be used together.
★ : These modes can be used together with some limitations.
→ : The original mode is overridden and only the newly selected mode is active.
✗ : These modes cannot be used together.

			Auto Image Density	Manual Image Density	Auto Color Select	Full Color	Black & White	Single Color	Twin Color	Auto Original Type Select	Original Image Type Selection	Auto Paper Select	Auto Reduce/Enlarge	Interrupt Copying	Program	Bypass Tray Copying/Duplex Back	Sort	Stack	Auto Staple	Manual Staple	Custom Size Original	Preset Reduce/Enlarge / Zoom
Image Density	Auto Image Density			☆	→	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆
	Manual Image Density		☆		☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆
Color Mode	Auto Color Select		✗	☆		→	→	→	→	✗	☆	☆	☆	☆	☆	☆	★	★	★	☆	☆	☆
	Full Color		☆	☆	→		→	→	→	☆	☆	☆	☆	☆	☆	☆	★	★	★	☆	☆	☆
	Black & White		☆	☆	→	→		→	→	→	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆
	Single Color		☆	☆	→	→	→		→	→	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆
	Twin Color		☆	☆	→	→	→	→		→	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆
Auto Original Type Select			☆	☆	→	☆	→	→	→		→	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆
Original Image Type Selection			☆	☆	☆	☆	☆	☆	☆	→		☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆
Auto Paper Select			☆	☆	☆	☆	☆	☆	☆	☆	☆		→	☆	☆	→	☆	☆	☆	☆	✗	☆
Auto Reduce/Enlarge			☆	☆	☆	☆	☆	☆	☆	☆	☆	→		☆	☆	★	☆	☆	☆	☆	✗	→
Interrupt Copying			☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆		✗	☆	✗	✗	✗	☆	☆	☆
Program	After recalling your settings		☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆		☆	☆	☆	☆	☆	☆	☆
Bypass Tray Copying/Duplex Back			☆	☆	☆	☆	☆	☆	☆	☆	☆	→	★	☆	☆		★	★	★	★	☆	☆
Finishing	Sort		☆	☆	★	★	☆	☆	☆	☆	☆	☆	☆	☆	☆	★		→	→	★	☆	☆
	Stack		☆	☆	★	★	☆	☆	☆	☆	☆	☆	☆	☆	☆	★	→		→	✗	☆	☆
	Staple		☆	☆	★	★	☆	☆	☆	☆	☆	☆	☆	☆	☆	★	→	→		—	☆	☆
Custom Size Original			☆	☆	☆	☆	☆	☆	☆	☆	☆	✗	✗	☆	☆	☆	☆	☆	☆	☆		☆
Reduce/Enlarge	Preset Reduce/Enlarge / Zoom		☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	→	☆	☆	☆	☆	☆	☆	☆	☆	
	Size Magnification		☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	→	☆	☆	☆	☆	☆	☆	☆	☆	→
	Directional Magnification		☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	→	☆	☆	☆	☆	☆	☆	☆	☆	→
	Poster Mode		☆	☆	✗	☆	☆	☆	☆	☆	☆	✗	→	✗	☆	★	✗	✗	✗	✗	✗	→
Shift/Book	Centering/Cornering		☆	☆	☆	☆	☆	☆	☆	☆	☆	✗	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆
	Margin Adjustment		☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	✗	✗	☆
	Center Erase		☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	✗	☆
	Center/Border Erase		☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	✗	☆
	Border Erase		☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	✗	☆
Duplex/Combine	Series	Book → 1 Sided	☆	☆	☆	☆	☆	☆	☆	☆	☆	✗	✗	☆	☆	→	☆	☆	☆	☆	✗	☆
		2 Sided → 1 Sided	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	✗	☆
	Combine	Combine 2 Originals	☆	☆	☆	☆	☆	☆	☆	☆	☆	✗	✗	☆	☆	→	☆	☆	☆	☆	✗	☆
		Combine 4 Originals	☆	☆	☆	☆	☆	☆	☆	☆	☆	✗	✗	☆	☆	→	☆	☆	☆	☆	✗	☆
	Duplex	1 Sided → 2 Sided	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	→	☆	☆	☆	☆	✗	☆
		2 Sided → 2 Sided	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	→	☆	☆	☆	☆	✗	☆
		Book → 2 Sided	☆	☆	☆	☆	☆	☆	☆	☆	☆	✗	✗	☆	☆	→	☆	☆	☆	☆	✗	☆
		Multi → 2 Sided	☆	☆	☆	☆	☆	☆	☆	☆	☆	✗	✗	☆	☆	→	☆	☆	☆	☆	✗	☆
	Cover Sheet		☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	✗	☆	★	☆	✗	☆	☆	✗	☆
	Image Overlay		✗	☆	✗	☆	☆	☆	☆	✗	☆	☆	✗	✗	✗	☆	✗	✗	✗	✗	✗	☆
Color Creation	Color Conversion		☆	☆	✗	☆	✗	✗	✗	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆
	Color Erase		☆	☆	✗	☆	☆	☆	✗	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆
	Color Background		☆	☆	✗	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆
	Type Mask		☆	☆	✗	☆	✗	✗	✗	✗	✗	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆
	Outline Image		☆	☆	☆	☆	☆	☆	✗	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆
	Shadow Image		☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆
	Slanted Image		☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆
Image Creation	Mirror Image		☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆
	Positive/Negative		☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆
	Repeat Image		☆	☆	☆	☆	☆	☆	☆	☆	☆	★	✗	☆	☆	☆	☆	☆	☆	☆	☆	☆
Program User Color			–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Color Adjustment			☆	☆	☆	☆	✗	✗	✗	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆
Color Balance Adjustment			☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆
Image Adjustment			☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆
Film Projector			✗	☆	☆	☆	☆	☆	☆	☆	☆	✗	☆	✗	☆	☆	☆	☆	✗	✗	✗	☆

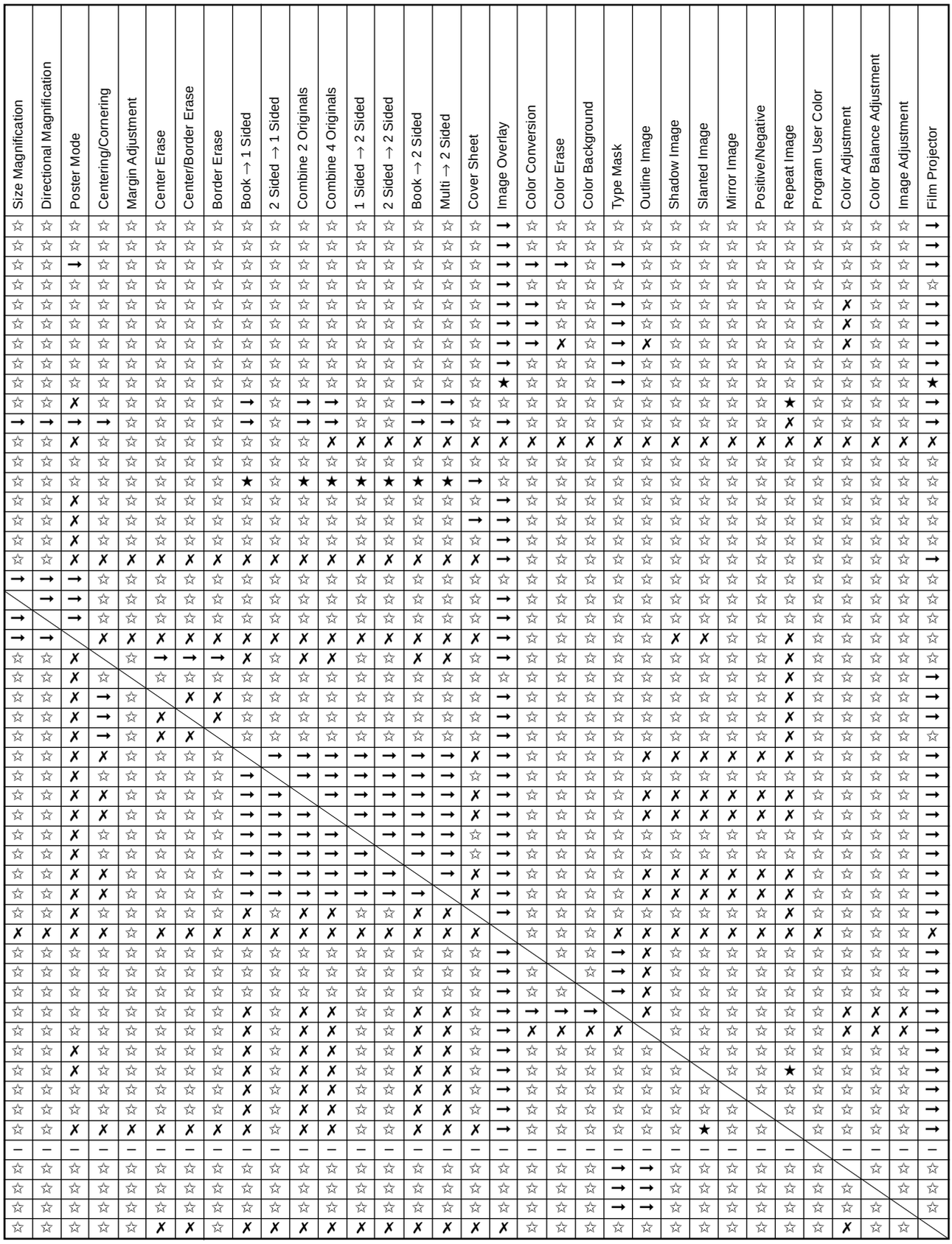
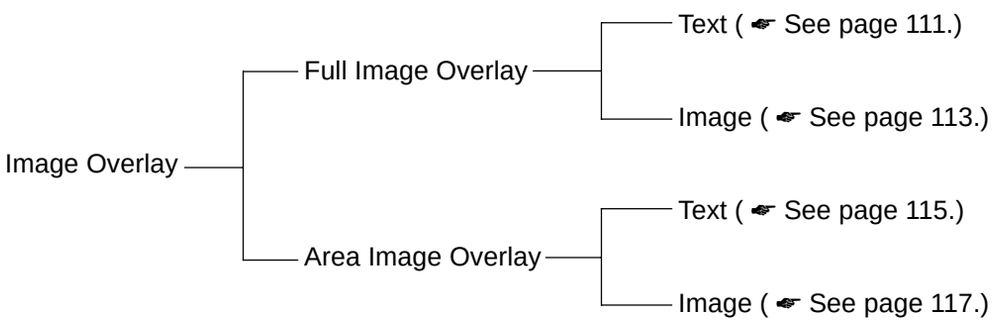

Size Magnification
Directional Magnification
Poster Mode
Centering/Cornering
Margin Adjustment
Center Erase
Center/Border Erase
Border Erase
Book → 1 Sided
2 Sided → 1 Sided
Combine 2 Originals
Combine 4 Originals
1 Sided → 2 Sided
2 Sided → 2 Sided
Book → 2 Sided
Multi → 2 Sided
Cover Sheet
Image Overlay
Color Conversion
Color Erase
Color Background
Type Mask
Outline Image
Shadow Image
Slanted Image
Mirror Image
Positive/Negative
Repeat Image
Program User Color
Color Adjustment
Color Balance Adjustment
Image Adjustment
Film Projector

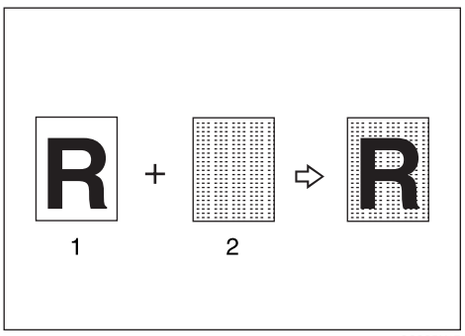
Image Overlay (Only for Edit Type)

Summary of Image Overlay

There are four kinds of Image Overlay.



Full Image Overlay (Only for Edit Type)



GCCOPM1E

1: Foreground image original
2: Background image original

This function overlay the foreground image original onto a background image original.

Text Overlay

This function can colorize a text original (foreground image original) and overlay it on the full color image original (background image original).

Reference

For functions that cannot be used together in image overlay. ☛ See 106.

Note

❒ Colors that can be selected as a text color:

Yellow, Beige, Orange, Red, Yellow Green, Cyan, Pink, Magenta, Green, Marine Blue, Blue, Purple, White, Black, and User Colors

❒ You can adjust the density to one of four levels (except white).

❒ If you did not select the text color, the text will be copied in the original color.

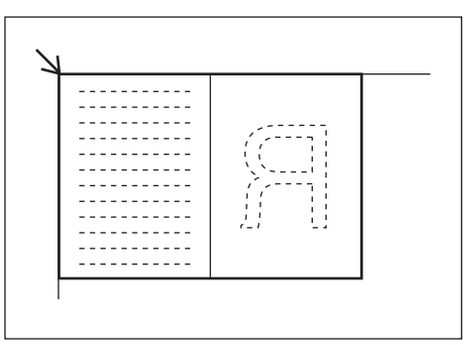
❒ The modes that can be set for the background image original are:

- Color/Image Adjustment: Image Density, Color Mode, Original Type, Image Adjustment, Color Adjustment, Color Balance Adjustment
- Color Creation: Color Conversion, Color Erase, Color Background

❒ The modes that can be set for the job settings as follows:

- Auto Paper Select
- Manual Paper Select
- Reduce/Enlarge (Preset Reduce/Enlarge, Zoom, Auto Reduce/Enlarge)
- Margin Adjustment

1 Set the foreground image original (original that has the text to be composed) on the right of the exposure glass. Then set the background image original (original that will be the background image) on the left of the exposure glass.



GCCOMP1E

Note

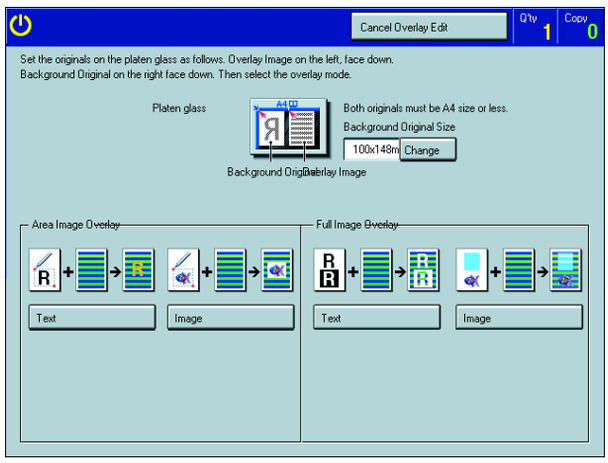
❒ You cannot set your originals in the document feeder.

2 Press the **[Image Overlay]** key.

Note

- The maximum original size is A4□, 8 1/2" × 11"□.
- When the background original is B5□, A5□, 8 1/2" × 11"□ Post card ▭ size, press the **[Change]** key.

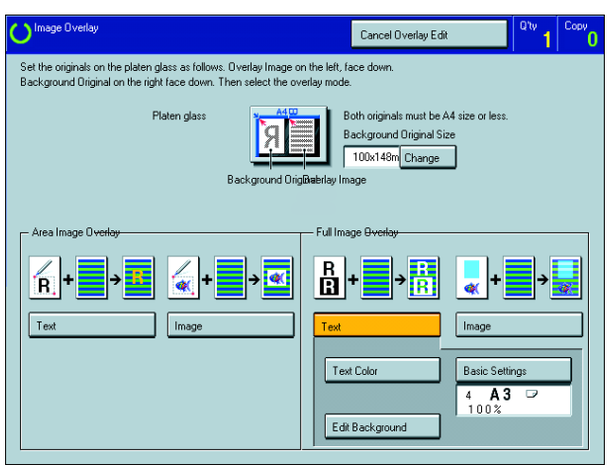
3 Press the **[Text]** key in the Full Image Overlay.



4 If you want to change the text color, press the **[Text Color]** key.

Note

- If you want to edit the background original, press the **[Edit Background]** key. For details, ☛ see page 121.
- If you want to change the job settings, press the **[Basic Settings]** key. For details, ☛ see page 122.



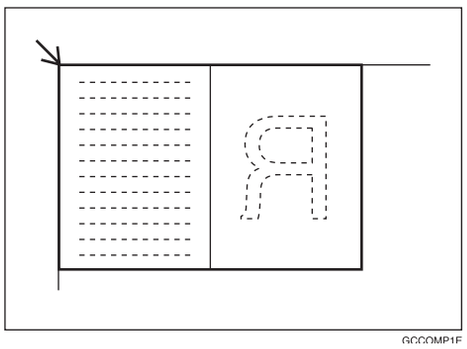
5 Select the color, then press the **[OK]** key.

6 Press the **[Start]** key.

Image Overlay

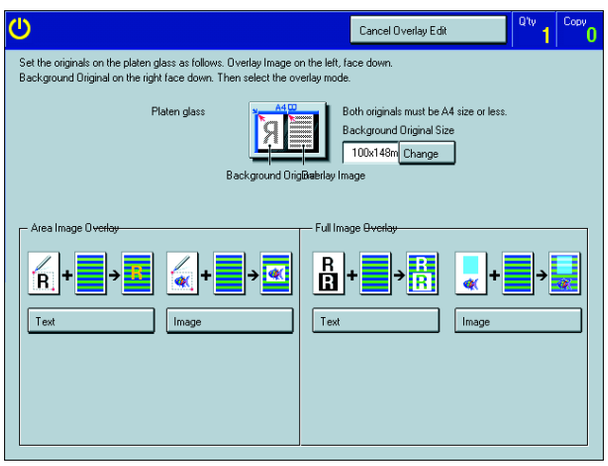
This function can overlay an image original on the full color base image original.

1 Set the foreground image original (original that has the image to be composed) on the right of the exposure glass. Then set the background image original (original that will be the background image) on the left of the exposure glass.

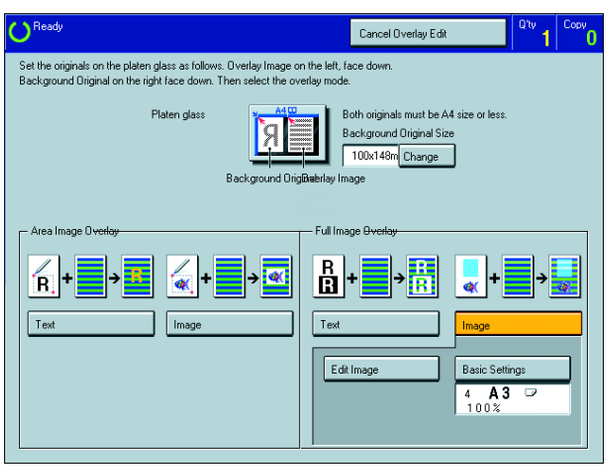


2 Press the **[Image Overlay]** key.

3 Press the **[Image]** key in the Full Image Overlay.



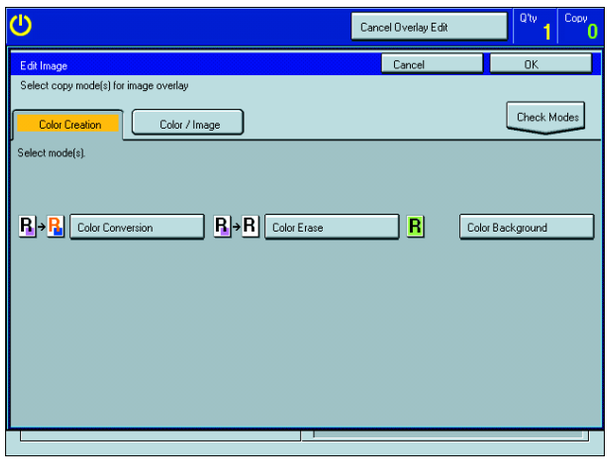
4 If you want to edit the image, press the **[Edit Image]** key.



Note

❒ If you want to change the job settings, press the **[Basic Settings]** key. For details, ☛ see page 122.

5 If you want to adjust the color creation, press the **[Color Creation]** key.



6 Make any adjustments you require.

Note

- ❒ Color Conversion, ☛ see page 85.
- ❒ Color Erase, ☛ see page 87.
- ❒ Color Background, ☛ see page 88.

7 Press the **[OK]** key.

8 If you want to adjust the color/image adjustment, press the **[Color/Image]** key.

9 Make any adjustments you require.

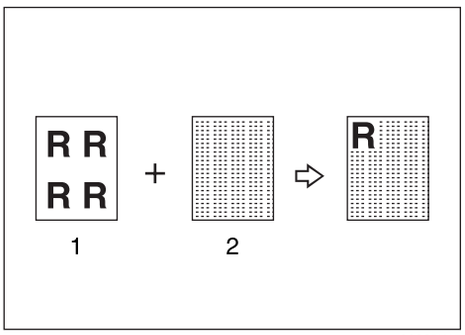
Note

- ❒ You can select the overlay image density with Overlay Opacity.
- ❒ Image Density, ☛ see page 39.
- ❒ Color Mode, ☛ see page 40.
- ❒ Original Type, ☛ see page 44.
- ❒ Image Adjustment, ☛ see page 132.
- ❒ Color Adjustment, ☛ see page 131.
- ❒ Color Balance Adjustment, ☛ see page 124.

10 Press the **[OK]** key.

11 Press the **[Start]** key.

Area Image Overlay (Only for Edit Type)



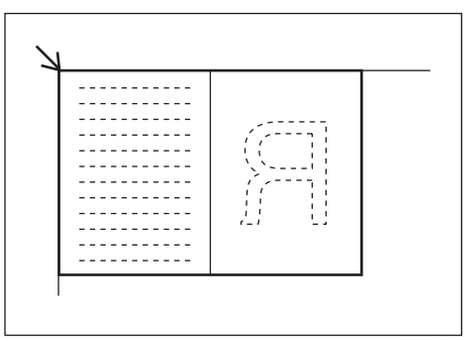
1: Foreground image original
2: Background image original

This function overlay a portion of the foreground image original onto a background image original.

Text Overlay

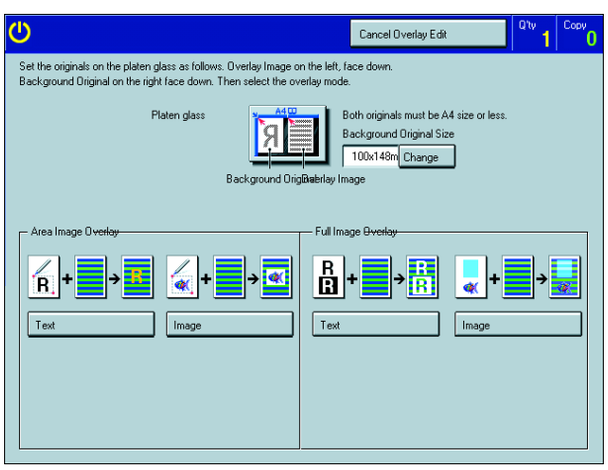
Use this function to colorize the text in the selected area and lay it over the background image.

1. Set the foreground image original (original that has the text or image to be composed) on the right of the exposure glass. Then set the background image original (original that will be the base image) on the left of the exposure glass.



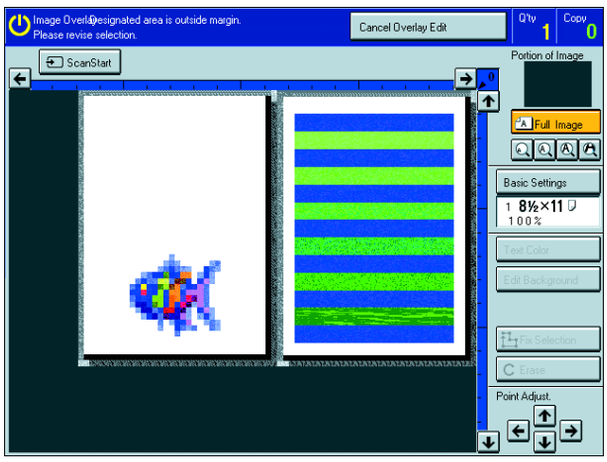
2. Press the **[Image Overlay]** key.

3. Press the **[Text]** key in the Area Image Overlay.



❒ The original images are displayed.

4 Mark diagonally opposite corners of the overlay image area to be overlaid.



Note

❒ If you want to clear the setting, press the **[Erase]** key.

5 Press the **[Confirm Selection]** key.

6 Mark diagonally opposite corners of destination area.

7 Press the **[Confirm Selection]** key.

8 If you want to change the text color, press the **[Text Color]** key.

Note

❒ If you want to edit the background original, press the **[Edit Background]** key. For details, ☛ see page 121.

❒ If you want to change the job settings, press the **[Basic Settings]** key. For details, ☛ see page 122.

9 Select the color, then press the **[OK]** key.

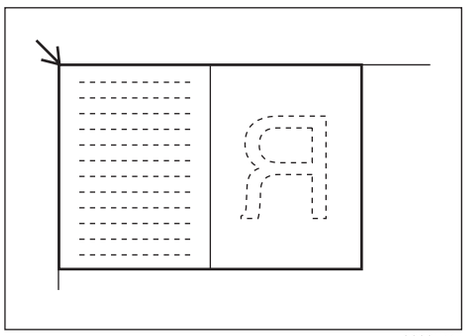
10 Press the **[Start]** key.

Image Overlay

This function can overlay a selected image over another original image.

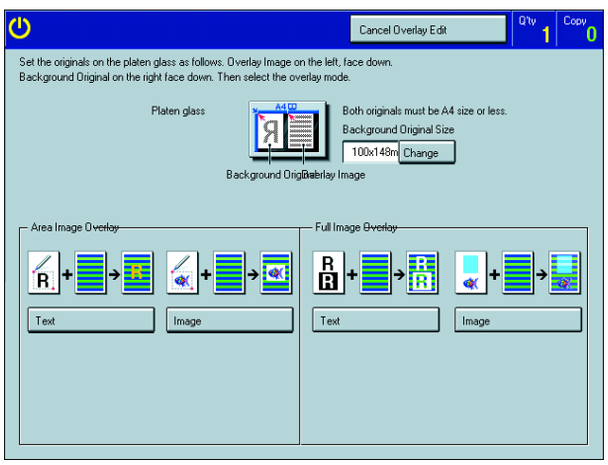
Image overlay without opacity mode

1 Set the foreground image original (original that has the image to be composed) on the right of the exposure glass. Then set the background image original (original that will be the background image) on the left of the exposure glass.

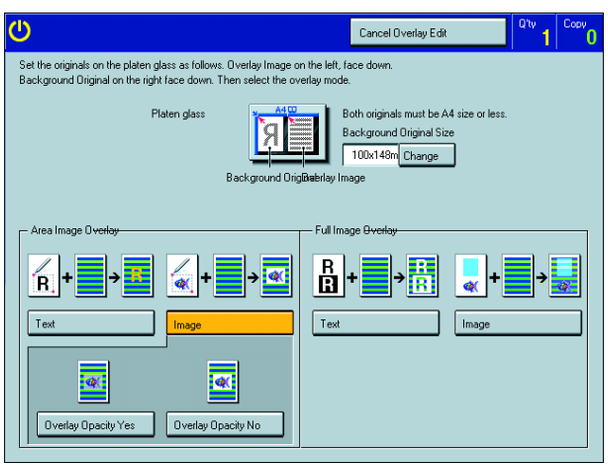


2 Press the **[Image Overlay]** key.

3 Press the **[Image]** key in the Area Image Overlay.



4 Select the **[Overlay Opacity No]** key.



5 Mark diagonally opposite corners of the overlay image area to be overlaid.

Note

❒ If you want to clear the setting, press the **[Erase]** key.

6 Press the **[Confirm Selection]** key.

7 Mark diagonally opposite corners of destination area.

8 Press the **[Confirm Selection]** key.

9 If you want to edit the image, press the **[Edit Overlay Image]** key.

Note

- If you want to edit the background original, press the **[Edit Background]** key. For details, ☛ see page 121.
- If you want to change the job settings, press the **[Basic Settings]** key. For details, ☛ see page 122.

10 If you want to adjust the color/image adjustment, press the **[Color/Image]** key.

11 Make any adjustments you require.

Note

- Image Density, ☛ see page 39.
- Color Mode, ☛ see page 40.
- Original Type, ☛ see page 44.
- Image Adjustment, ☛ see page 132.
- Color Adjustment, ☛ see page 131.
- Color Balance Adjustment, ☛ see page 124.

12 Press the **[OK]** key.

13 If you want to adjust the color creation, press the **[Color Creation]** key.

14 Make any adjustments you require.

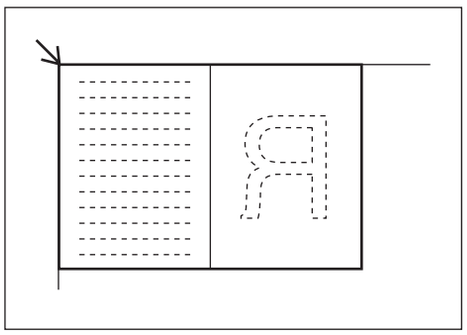
Note

- Color Conversion, ☛ see page 85.
- Color Erase, ☛ see page 87.
- Color Background, ☛ see page 88.

15 Press the **[OK]** key.

16 Press the **[Start]** key.

Image overlay with opacity mode


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1. Set the foreground image original (original that has the image to be composed) on the right of the exposure glass. Then set the background image original (original that will be the background image) on the left of the exposure glass.
2. Press the **[Image Overlay]** key.
3. Press the **[Image]** key in the Area Image Overlay.
4. Select the **[Overlay Opacity Yes]** key.
5. Mark diagonally opposite corners of the overlay image area to be overlaid.

Note

❒ If you want to clear the setting, press the **[Erase]** key.

6. Press the **[Confirm Selection]** key.
7. Mark diagonally opposite corners of destination area.
8. Press the **[Confirm Selection]** key.
9. If you want to edit the image, press the **[Edit Overlay Image]** key.

Note

❒ If you want to change the job settings, press the **[Basic Settings]** key. For details, ☛ see page 122.

10. If you want to adjust the color/image adjustment, press the **[Color/Image]** key.

11 Make any adjustments you require.

Note

- ❒ You can select the overlay image density with Overlay Opacity.
- ❒ Image Density, ☛ see page 39.
- ❒ Color Mode, ☛ see page 40.
- ❒ Original Type, ☛ see page 44.
- ❒ Image Adjustment, ☛ see page 132.
- ❒ Color Adjustment, ☛ see page 131.
- ❒ Color Balance Adjustment, ☛ see page 124.

12 Press the **[OK]** key.

13 If you want to adjust the color creation, press the **[Color Creation]** key.

14 Make any adjustments you require.

Note

- ❒ Color Conversion, ☛ see page 85.
- ❒ Color Erase, ☛ see page 87.
- ❒ Color Background, ☛ see page 88.

15 Press the **[OK]** key.

16 Press the **[Start]** key.

Edit Background—Editing the Image to be Composed

You can edit the selected image.

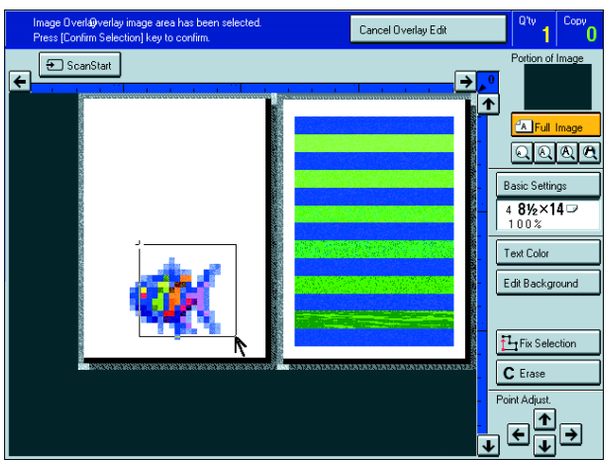
Note

❒ The modes that can be set are as follows:

- Color/Image: Image Density, Color Mode, Original Type, Image Adjustment, Color Adjustment, Color Balance Adjustment
- Color Creation: Color Conversion, Color Erase, Color Background

Color/Image

1 Press the **[Edit Background]** key.



2 Press the **[Color/Image]** key.

3 Make any adjustments you require.

Note

❒ Image Density, ☛ see page 39.

❒ Color Mode, ☛ see page 40.

❒ Original Type, ☛ see page 44.

❒ Image Adjustment, ☛ see page 132.

❒ Color Adjustment, ☛ see page 131.

❒ Color Balance Adjustment, ☛ see page 124.

4 Press the **[OK]** key.

Color Creation

1 Press the **[Edit Background]** key.

2 Press the **[Color Creation]** key.

3 Make any adjustments you require.

Note

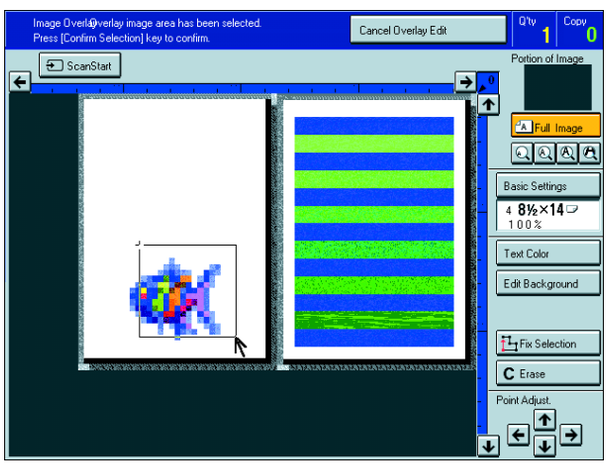
- ❒ Color Conversion, ☛ see page 85.
- ❒ Color Erase, ☛ see page 87.
- ❒ Color Background, ☛ see page 88.

4 Press the **[OK]** key.

Basic Settings—Changing Job Settings

You can change the job settings.

1 Press the **[Basic Settings]** key.



2 Make any adjustments you require.

Note

- ❒ Auto Paper Select, ☛ see page 47.
- ❒ Preset R/E / Zoom, ☛ see page 59.
- ❒ Margin Adjustment, ☛ see page 78.

3 Press the **[OK]** key.

Adjustment and Color Memory

Color Balance—Adjusting and Storing the Color Balance

This function allows you to control the overall color tone of copies by adjusting the Yellow, Magenta, Cyan and Black color balance. Nine levels of tone are available.

Reference

For copy sample, ☛ see page 19.

Note

❒ The color balance will return to the default when:

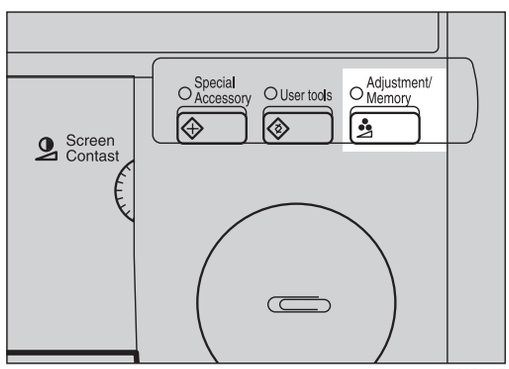
- The machine is automatically reset.
- The **[Clear Modes]** key is pressed.
- The operation switch is turned off.
- The main power switch is turned off.

❒ You can store and adjustments you make in memory and recall them later.

❒ You can sample color balance. ☛ See page 126.

Color Balance Adjustment

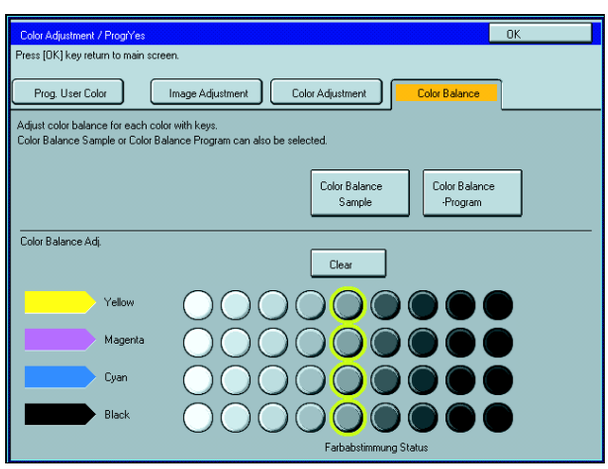
1 Press the **[Adjustment/Memory]** key.



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2 Make sure that the **[Color Balance]** key is selected.

3 Adjust the color balance, then press the **[OK]** key.



Color Balance Program—Storing and Recalling the Color Balance

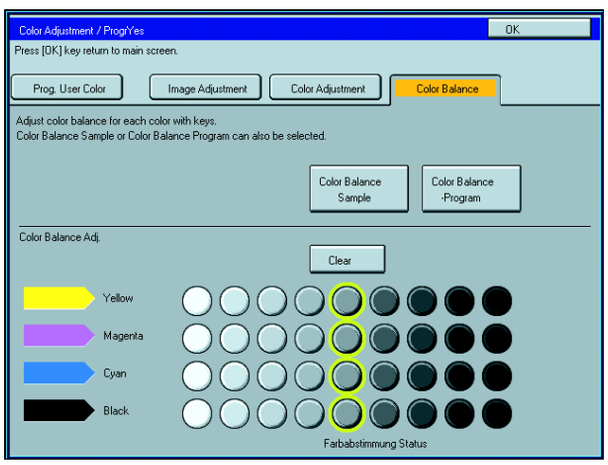
You can store the color balance setting in memory and recall it when you want to use it.

Note

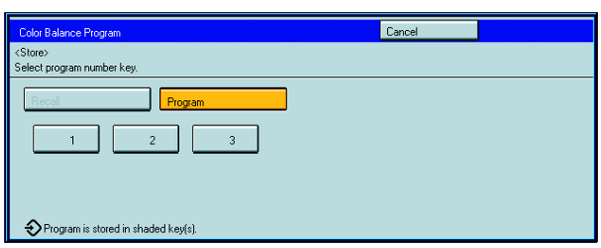
❒ You can store up to three color balance.

Storing the adjusted color balance

1. Change the color balance (☛ see page 124), but don't press the **[OK]** key.
2. Press the **[Color Balance Program]** key.

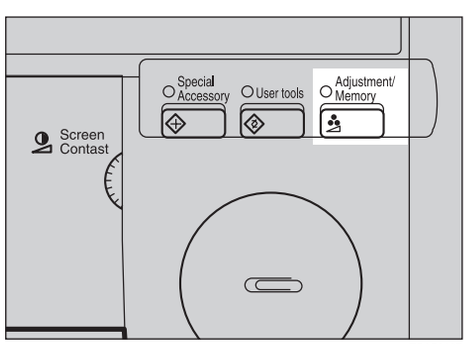


3. Press the **[Program]** key.
4. Select a number for this setting.



Recalling the color balance

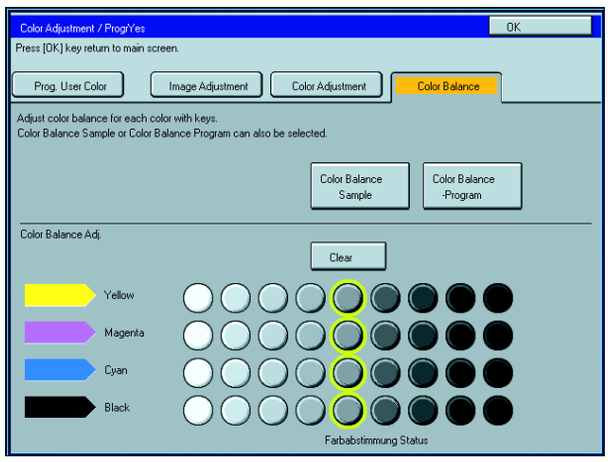
1. Press the **[Adjustment/Memory]** key.



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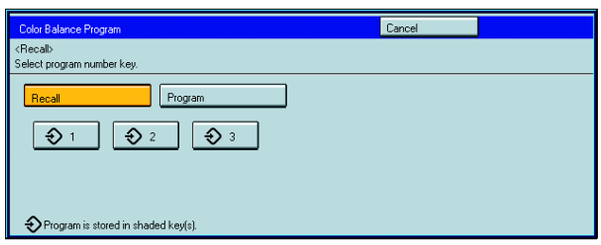
2. Make sure that the **[Color Balance]** key is selected.

3 Press the **[Color Balance Program]** key.



4 Make sure that the **[Recall]** key is selected.

5 Select the setting you want to recall.



Note

❒ Only color balance programs with ◈ contain a color balance.

Color Balance Sample—Sampling the Color Balance

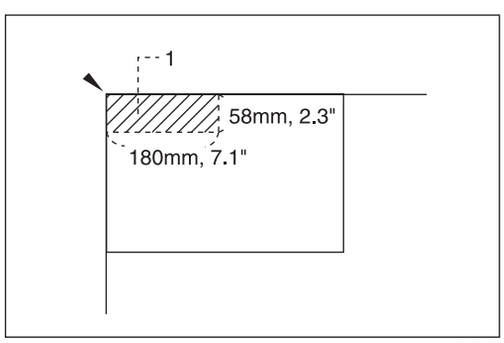
Adjusting the color balance by trial and error could require many copies. The color balance sampling function allows you to produce nine samples on two copies. The first sample of each sheet uses the current color balance (standard). Each sample after that changes one toner color by a fixed number of steps.

Note

❒ The sample will be copied on two A4□, 8 1/2" × 11"□ sheets or two A3□, 11" × 17"□ sheets.

❒ Selecting Color Balance Sample does not reset the adjustments, allowing you to make many samples while progressively changing the balance. The sample might yield a color balance outside the copier's range which will be reproduced on the sample but not on the copy.
For example, if yellow is already adjusted to +3 and you select Sample ±4, the yellow samples will be copied at yellow +7 and –1, but the adjustment for the final copy cannot be set to +7.

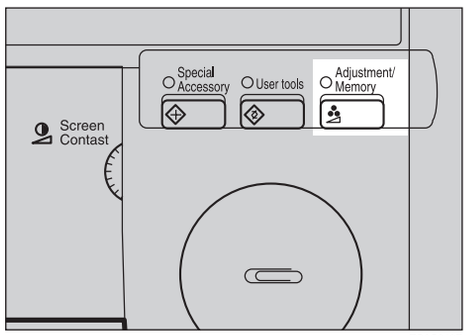
❒ The sampled area is as shown in the illustration.



1: Sampled area

❒ If your machine is Edit type, you can select the sampled area. ☛ See page 128.

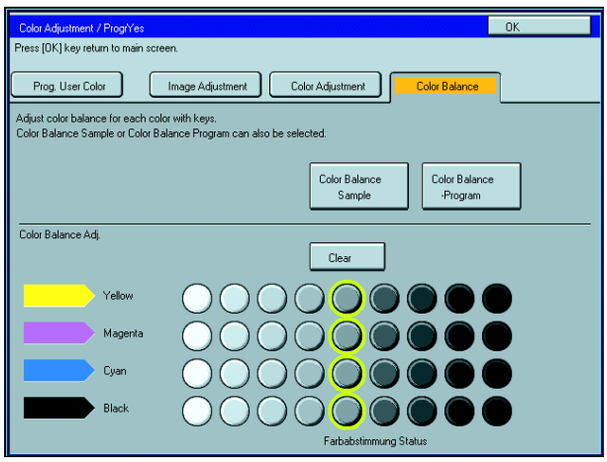
1 Press the **[Adjustment/Memory]** key.



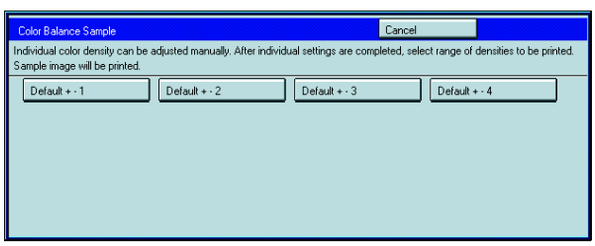
TCAS340E

2 Make sure the **[Color Balance]** key is selected.

3 Press the **[Color Balance Sample]** key.

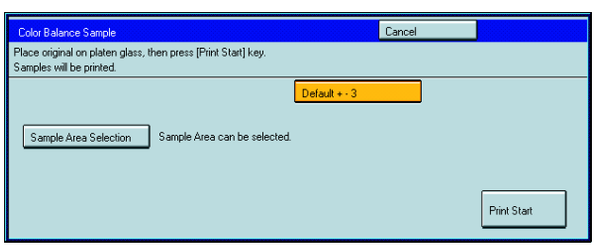


4 Select the range of densities (standard is the current setting).



5 Set your original on the exposure glass.

6 Press the **[Print Start]** key.



Note

❒ The sample is copied.

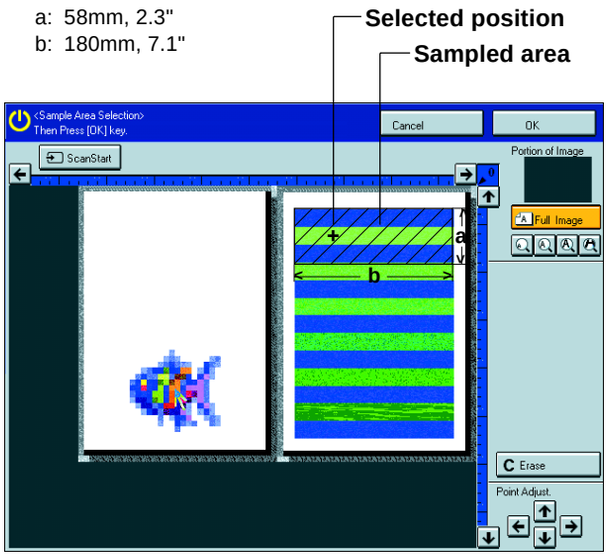
7 Select the color balance that you want to set, then press the **[OK]** key.

Selecting the sampled area (Only for Edit type)

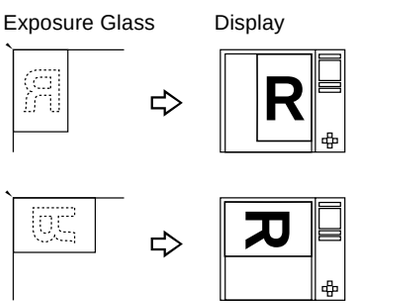
Note

❒ The sampled area is as shown below.

a: 58mm, 2.3"
b: 180mm, 7.1"

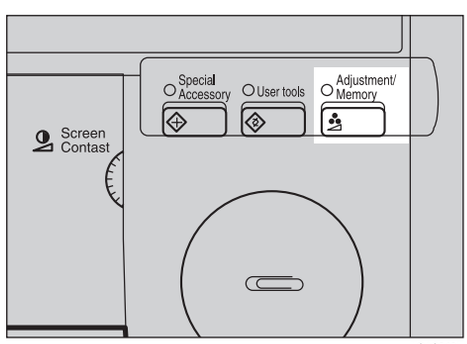


❒ Orientation of the original and scanned image are related as shown:



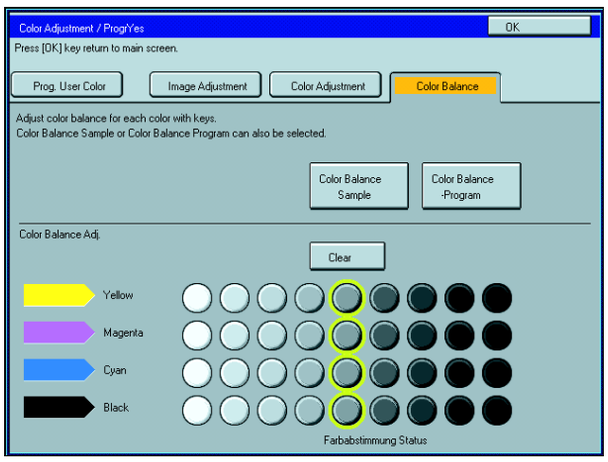
GCAREA5E

1 Press the **[Adjustment/Memory]** key.



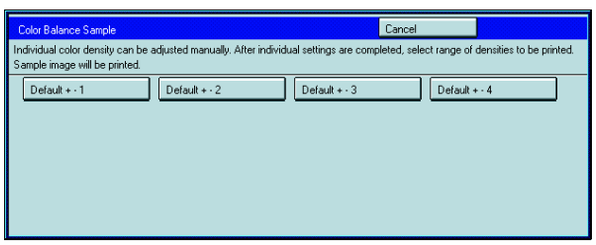
TCAS340E

2 Make sure the **[Color Balance]** key is selected.



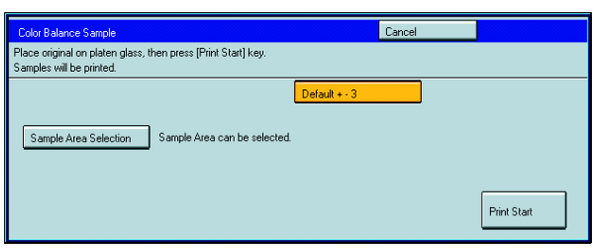
3 Press the **[Color Balance Sample]** key.

4 Select the range of densities (standard is the current setting).

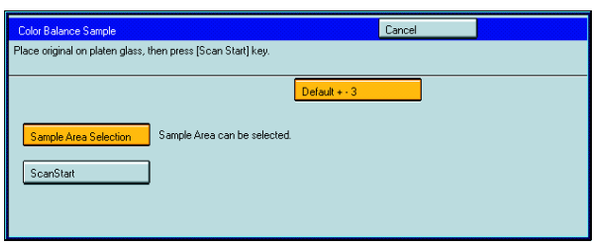


5 Set your original on the exposure glass.

6 Press the **[Sample Area Selection]** key.



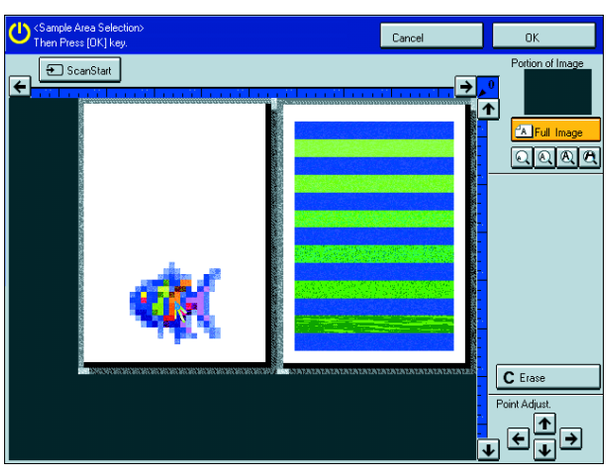
7 Press the **[Scan Start]** key.



Note

❒ The image of the original is displayed.

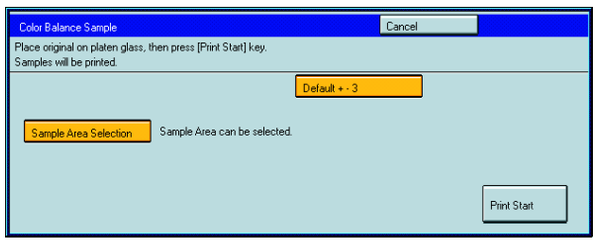
8 Point at the center of the area with the editor pen, then press the **[OK]** key.



Note

❒ For details about this display, ☛ see page 142.

9 Press the **[Print Start]** key.



Note

❒ The sample is copied.

10 Select the color balance that you want to set, then press the **[OK]** key.

Color Adjustment

This function lets you alter up to three single colors by mixing them with adjacent colors in the color circle. For example, yellow can be shifted towards red to make orange, or towards green to make a yellow green. Note that only areas of the image containing this color will be modified.

Reference

For copy samples, ☛ see page 20.

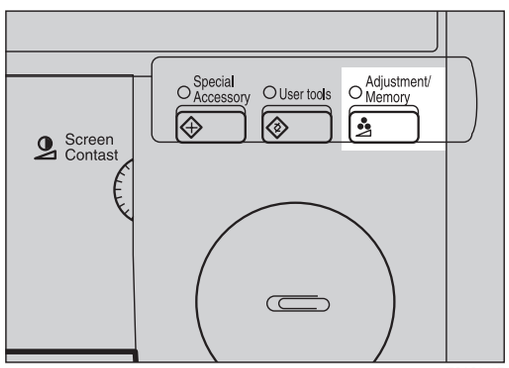
Note

❒ This function requires Full Color mode or Auto Color Select mode.

❒ The single color adjustment will return to the default when:

- The machine is automatically reset.
- The **[Clear Modes]** key is pressed.
- The operation switch is turned off.
- The main power switch is turned off.

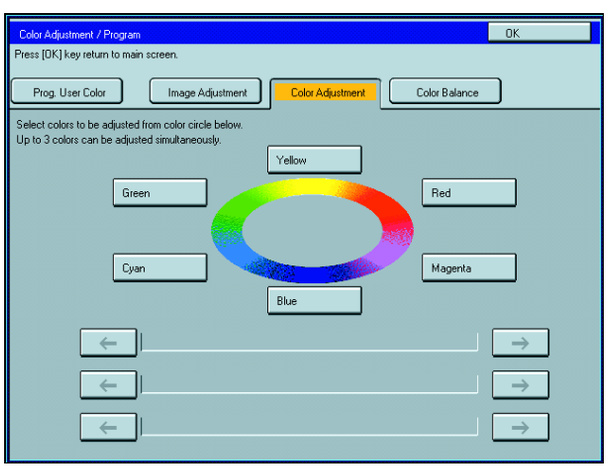
1 Press the **[Adjustment/Memory]** key.



TCAS340E

2 Press the **[Color Adjustment]** key.

3 Select the color key that you want to adjust from the color circle.

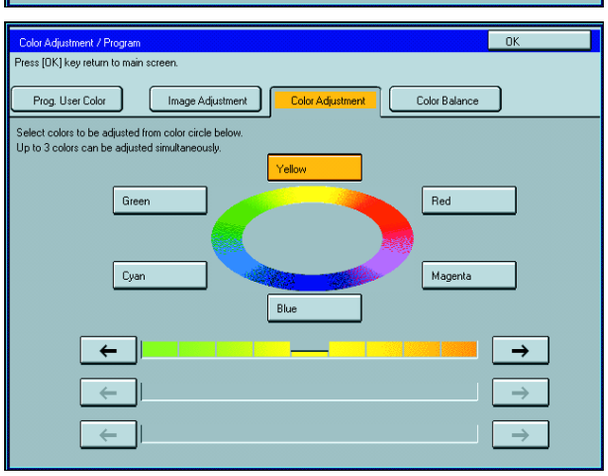


4 Adjust the color with the keys.

Note

❒ For example, if you wish to make yellow appear more red, press the **[→]** key.

❒ If you wish to make yellow appear more green, press the **[←]** key.



5 Press the **[OK]** key.

Image Adjustment

You can change the following default settings for image adjustment:

Soft/Sharp	You can adjust the edges of the image to make the image sharper or softer. **Reference** ❒ For copy samples, ☛ see page 20. **Note** ❒ Default: level 4
Contrast	You can adjust the contrast between light parts and dark parts of the image. **Reference** ❒ For copy samples, ☛ see page 20. **Note** ❒ Default: level 5
Background Density	You can adjust the background density control. **Reference** ❒ For copy samples, ☛ see page 20. **Note** ❒ Default: level 5 ❒ If copying a newspaper or an original with a dark background, adjust the background density to a lighter setting. ❒ If part of the original is marked with a highlighting pen, adjust the background density to a darker setting. However, because the color of a highlighting pen is difficult to duplicate, it might be copied in different colors or some colors might not be copied.
Pastel	You can make copies in pastel tones. **Reference** ❒ For copy samples, ☛ see page 20. **Note** ❒ Default: level 9 which yields a normal color copy
U.C.R. Adjustment	You can adjust the black toner density to make the black parts clearer in Full Color mode. **Note** ❒ Default: level 5 ❒ Adjust this setting to a darker setting when you want to copy letter parts clearly in black. ❒ Adjust this setting to a lighter setting when the original image is dark.
A.C.S. (Auto Color Selection) Sensitivity	You can adjust the sensitivity when detecting whether the original has color areas in Auto Color Select mode. When set to “B&W” values, the machine will be more likely to detect originals as black originals. “Full Color” values will cause the machine to be more likely to detect originals as color originals. **Note** ❒ Default: level 3
Text/Photo Sensitivity	You can adjust the sensitivity when detecting letter and photo parts of an original in Text/Photo mode. If letter parts photo parts of an original are not differentiated correctly, adjust this setting. **Note** ❒ Default: level 5

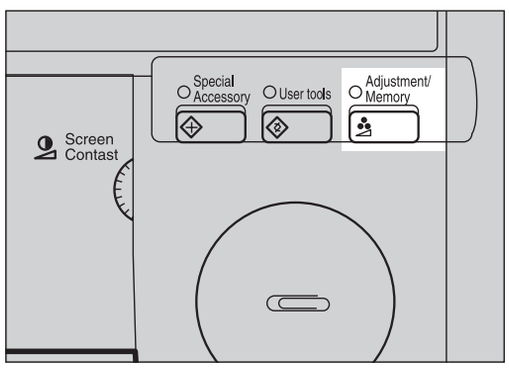
Soft/Sharp, Contrast, Background Density, and Pastel

Note

❒ Any settings you make with the Soft/Sharp, Contrast, Background Density and Pastel functions will be canceled under the following conditions:

- The machine is automatically reset.
- The **[Clear Modes]** key is pressed.
- The operation switch is turned off.
- The main power switch is turned off.

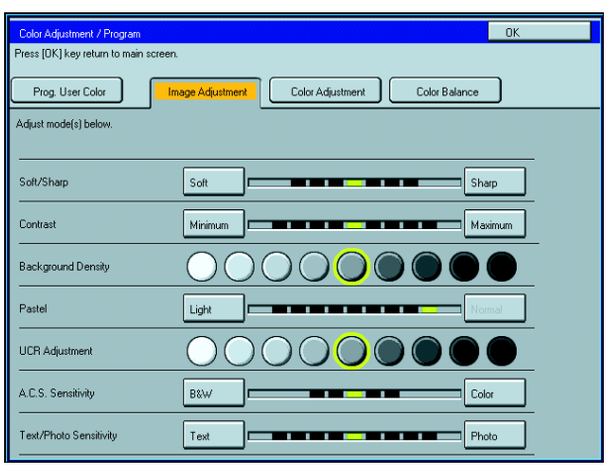
1 Press the **[Adjustment/Memory]** key.



TCAS340E

2 Press the **[Image Adjustment]** key.

3 Adjust the settings.



Reference

For details, ☛ see page 131.

4 Press the **[OK]** key.

Note

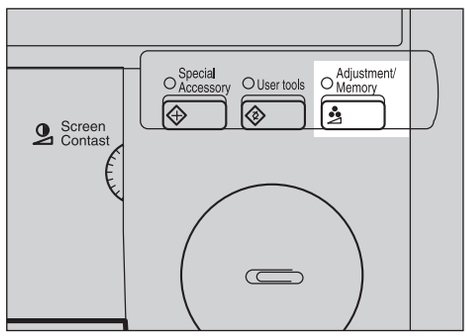
❒ If you do not press the **[OK]** key, you can still make copies, but the Image Adjustment settings you have just entered will not used. However, any settings or featured you choose before pressing the **[Adjustment/Memory]** key will still apply.

U.C.R. Adjustment, A.C.S. Sensitivity and Text/Photo Sensitivity

Note

❒ Any settings you make with the U.C.R. Adjustment, A.C.S. Sensitivity, and Text/Photo Sensitivity functions are not cleared by turning the power off or by pressing the **[Clear Modes]** key. They are canceled only when you overwrite them with new settings.

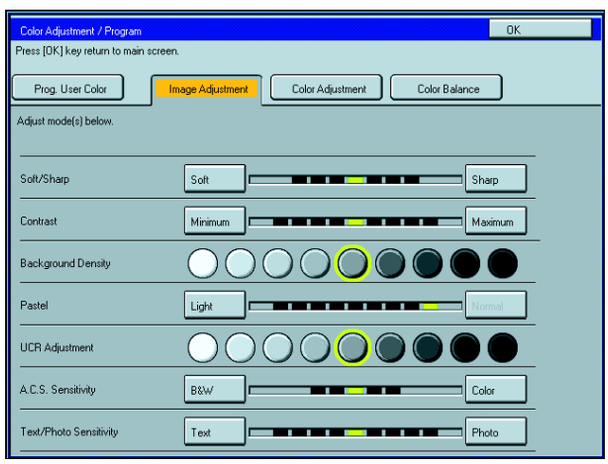
1 Press the **[Adjustment/Memory]** key.



TCAS340E

2 Press the **[Image Adjustment]** key.

3 Adjust the settings.



Reference

For details, ☛ see page 131.

4 Press the **[OK]** key.

Note

❒ If you do not press the **[OK]** key, you can still make copies, but the Image Adjustment settings you have just entered will not used. However, any settings or featured you choose before pressing the **[Adjustment/Memory]** key will still apply.

Program User Color—Storing User Colors

In addition to the base colors, you can store up to 15 customized colors into memory (User Color).

Reference

Color sample chart, ☛ see page 23.

If your machine is Edit type, you can sample the user color. ☛ See page 138.

Note

❒ There are two ways to make user colors as follows:

- Adjusting a selected base color
- Mixing colors manually with **[Number]** keys

❒ Up to 15 colors can be stored.

❒ The total percentages of the mixed colors must be 255% or less.

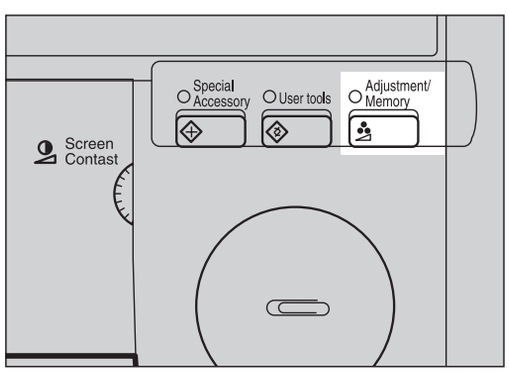
❒ If the total percentage of the mixed color is over 255%, the copier cannot create the color properly and the results will appear different.

❒ If the total percentage of the mixed colors is too low, it may not be bonded to the paper properly resulting in a change in image density.

❒ The appearance of user colors might vary slightly according to the image type you have selected (ex. Photo, Text, etc.).

Adjusting Colors Based on the Selected Color

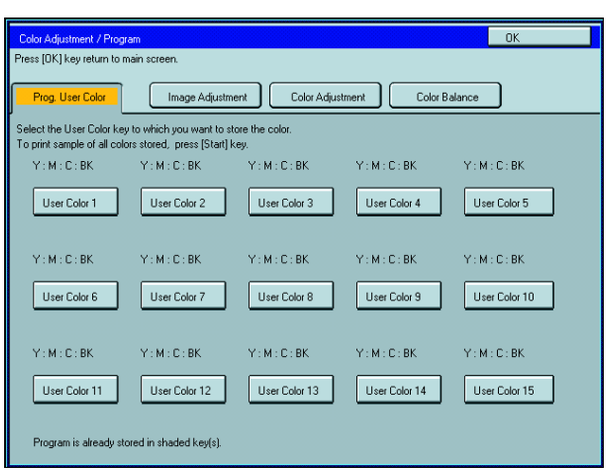
1 Press the **[Adjustment/Memory]** key.



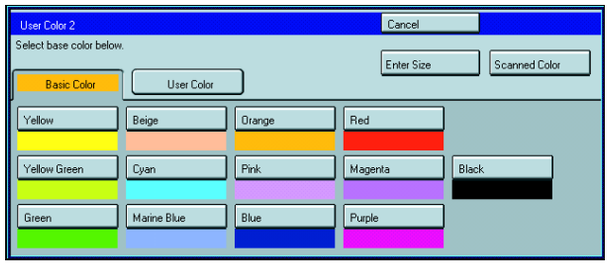
TCAS340E

2 Press the **[Prog. User Color]** key.

3 Select the key you wish to store the color in.



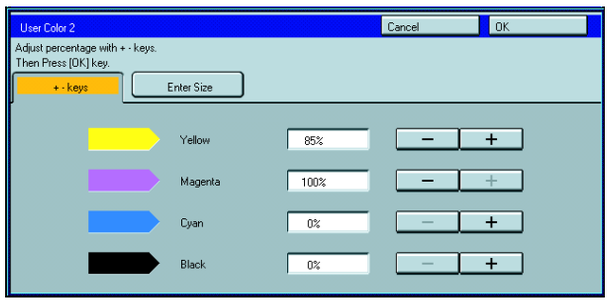
4 Select the base color.



Note

❒ If your machine is Edit type, you can scan an original to sample it's color. ☛ See page 128.

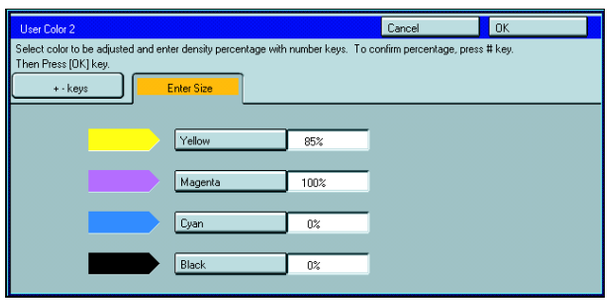
5 You can change the color density in two ways.



Note

❒ Increase or decrease in steps with the **[+]** or **[-]** key. —Press the **[+ - keys]** key.

❒ Enter the percentage with the **[Number]** keys.—Press the **[Enter Size]** key.

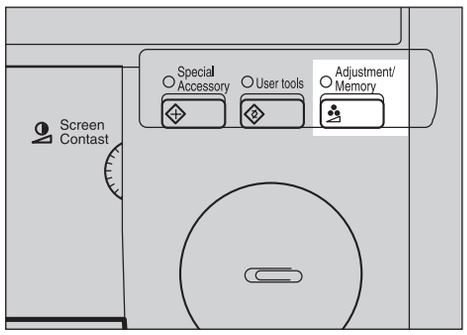


6 Repeat step 5 for each color, then press the **[OK]** key.

7 Press the **[OK]** key.

Mixing Colors Manually with the Number Keys

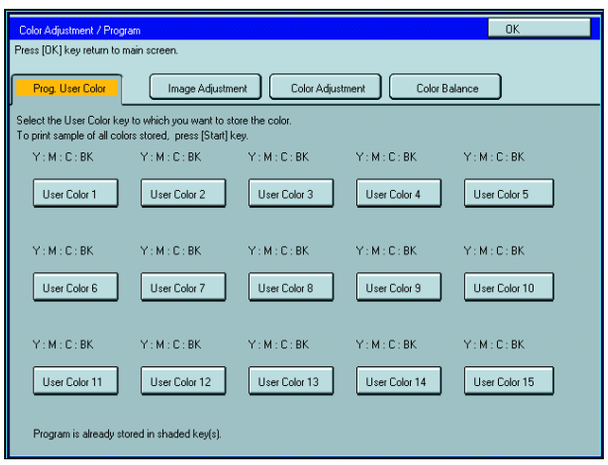
1 Press the **[Adjustment/Memory]** key.



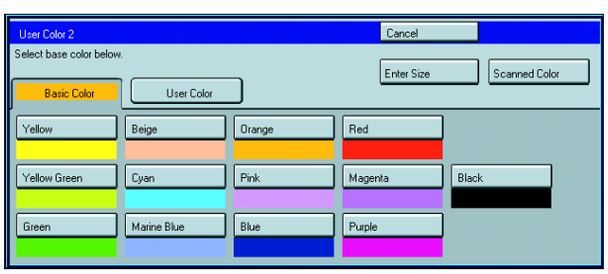
TCAS340E

2 Press the **[Prog. User Color]** key.

3 Select the number that you want to store the user color in.

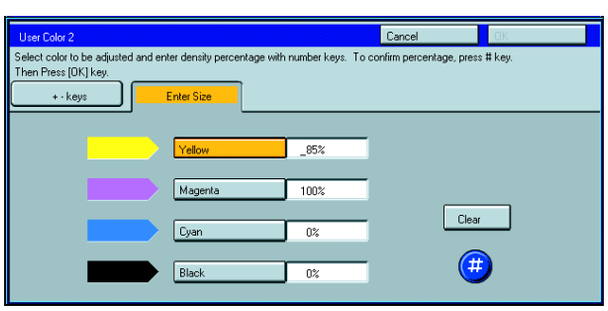


4 Press the **[Enter Size]** key.



5 Select the color that you want to adjust.

6 Enter the density with the **[Number]** keys, then press the **[#]** key.



Note

❒ To change the number, press the **[Clear]** key.

7 Repeat steps 5 and 6 for each color then press the **[OK]** key.

8 Press the **[OK]** key.

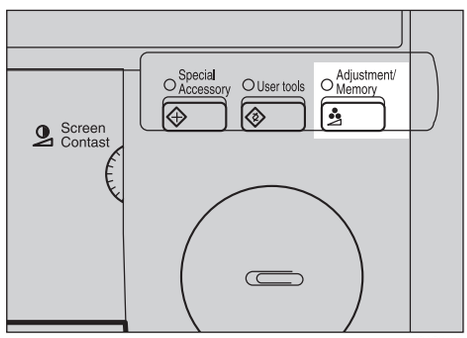
Sampling the User Color (Only for Edit Type)

You can print out a sample of User Colors to check the colors you have made.

Note

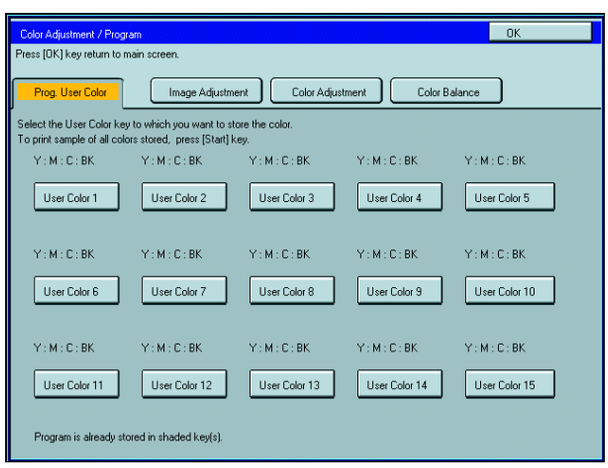
❒ The sample will be copied on a A4□, 8 1/2" × 11" □ sheet or a A3□, 11" × 17"□ sheet.

1 Press the **[Adjustment/Memory]** key.



TCAS340E

2 Press the **[Prog. User Color]** key.



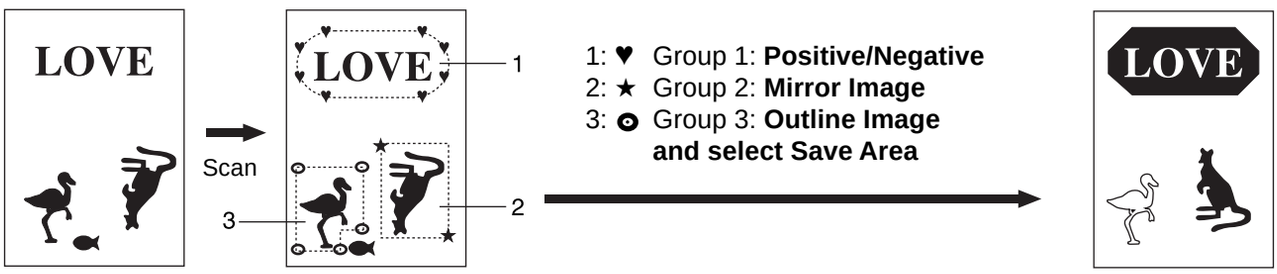
3 Press the **[Start]** key.

Area Editing (Only for Edit Type)

What is Area Editing?

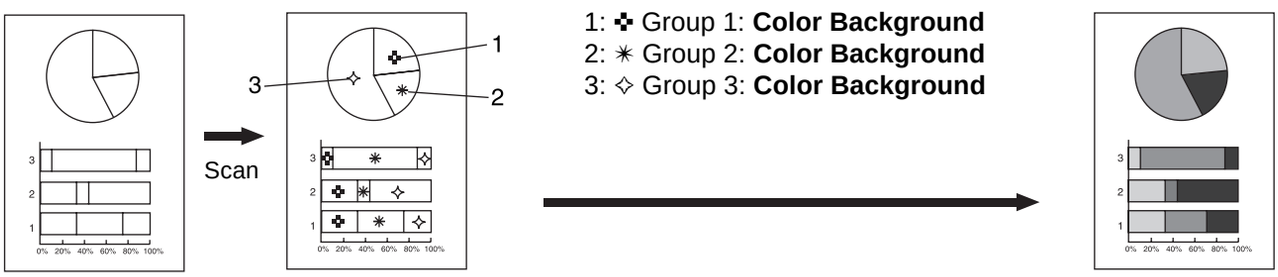
If your machine is Edit type, you can select areas of an image to be treated differently or have effects applied to them. Some examples are shown below.

Example:



Original | Designate areas (There is an area in each group.) | Specify modes for each group. | Copy

GCAREA0E



Original | Designate areas (There are 4 areas in each group.) | Specify modes for each group. | Copy

GCAREA1E

Note

❒ “Group” means a set of areas that you want to do the same edit.

How to Edit Areas

Editing an image involves scanning it in to memory, choosing areas to edit and how those areas will be reproduced.

The basic steps are summarized below. Details are given in the rest of this section.

❶ Enter Area Editing mode.

❒ Press the **[Area Editing]** key.

↓

❷ Designate areas.

❒ ☛ See page 142.

↓

❸ Select modes.

❒ ☛ See page 152.

↓

❹ Specify more areas to be treated differently (optional).

❒ Repeat 3 and 4.

↓

❺ Copy image.

❒ Press the **[Start]** key.

Designating Areas

Several tools are provided for designating areas of an image.

Area Shapes
- Rectangle: Specify two points defining the opposite diagonals of a rectangle.
- Right Angle Polygon/Polygon: Specify a sequence of points defining a polygon.
- Closed Loop: If your image contains a shape outlined in black and that outline forms a closed loop, specify a point inside the shape to designate it.
- Multi-Closed Loop: If your image contains a closed loop and that outline forms an another closed loop, specify points inside of the closed loop to designate it.

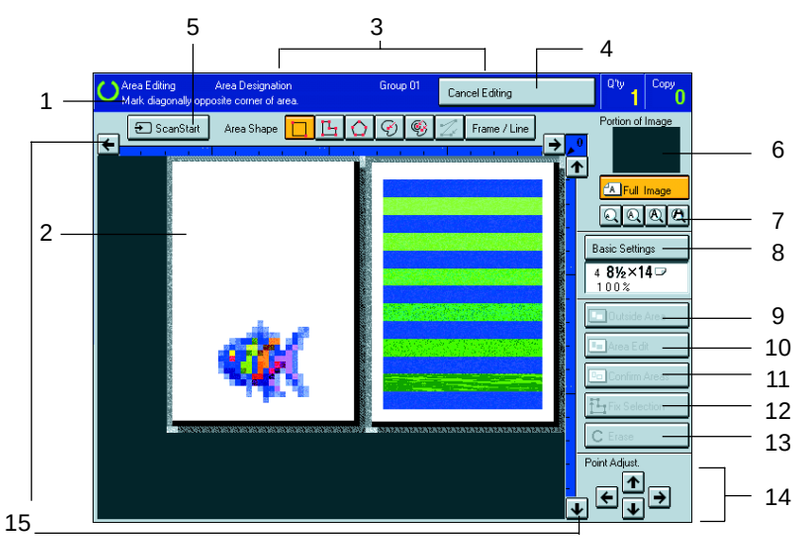
Frame/Line
- Rectangle frame: Specify straight frames by Rectangles.
- Right Angle Polygon/Polygon frame: Specify straight frames by Right Angle Polygon/Polygon.
- Line: Specify a series of points linked together by straight lines.

Note

❒ You can designate many areas and apply the same changes to them all by placing them in the same Group.

❒ Different areas may be treated differently by placing them in different Groups.

Designate Area Display



1. Message Area
Messages and instructions appear here.

2. Display Area
The image is displayed.

3. Area Shape/Frame/Line
Select the area shape or frame shape and line.

4. Cancel Editing
Exit area editing.

5. Scan Start
Scan in an original again.

6. Portion of Image
Shows the portion of the original that is currently being viewed or is enlarged.

7. Enlarge
Enlarge 4

Enlarge by about 528%

Enlarge 3

Enlarge by about 394%

Enlarge 2

Enlarge by about 264%

Enlarge 1

Enlarge by about 200%

Full Image

Note

❒ After pressing the **[Enlarge]** key, mark a point in the displayed image to zoom in on.

8. Basic Settings
Change the job settings for the entire image.

9. Outside Area
Set modes for outside areas.

10. Area Edit
Edit inside the area.

11. Confirm Areas
Show selected areas, modes, and groups.

12. Confirm Selection
Complete a designated area.

13. Erase
Cancel last point selected.

14. Arrow keys
Move cursor in small steps.

15. Scroll key
Move the portion of the original.

Note

❒ Do not press the touch panel display with any hard or sharp object. Always use the editor pen.

❒ When you mark a point with the editor pen, the cursor position might not be quite right. In this case, move the cursor in small steps by pressing the arrow keys on the display.

Designate Area Tools

Note

❒ There are nine tools to designate areas.

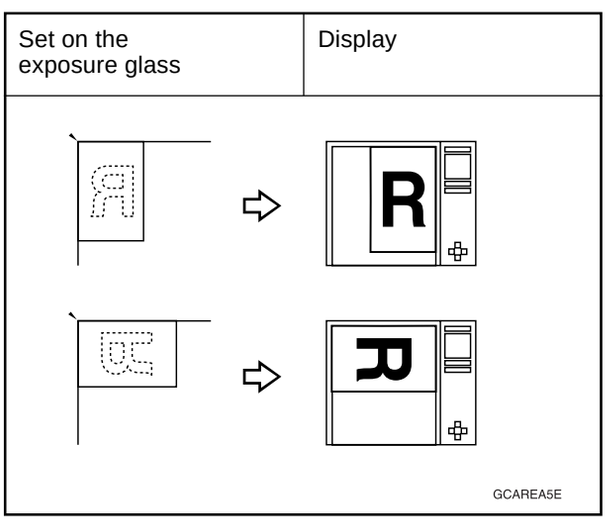
Area Editing

- Area Shape
  - Rectangle (☛ See page 145.)
  - Right Angle Polygon (☛ See page 146.)
  - Polygon (☛ See page 146.)
  - Closed Loop (☛ See page 146.)
  - Multi Closed Loop (☛ See page 147.)
- Frame/Line
  - Rectangle frame (☛ See page 148.)
  - Right Angle Polygon frame (☛ See page 148.)
  - Polygon frame (☛ See page 148.)
  - Line (☛ See page 149.)

Note

❒ You cannot use the optional document feeder in this function.

❒ The relationships between the position of the original and the orientation of the scanned image on the display are as follows:

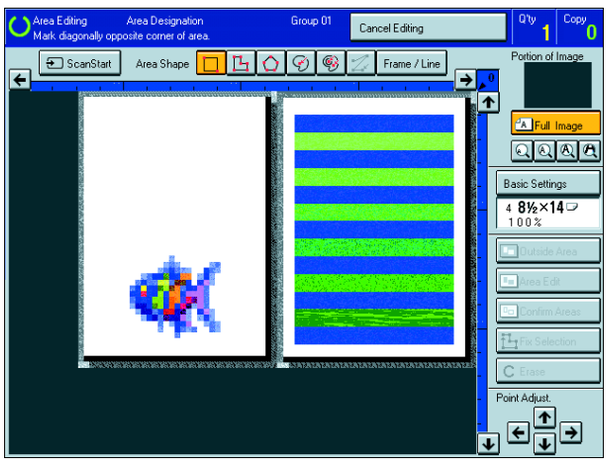


Area Shapes

Rectangle

1 Set your original on the exposure glass.

2 Press the **[Area Editing]** key.

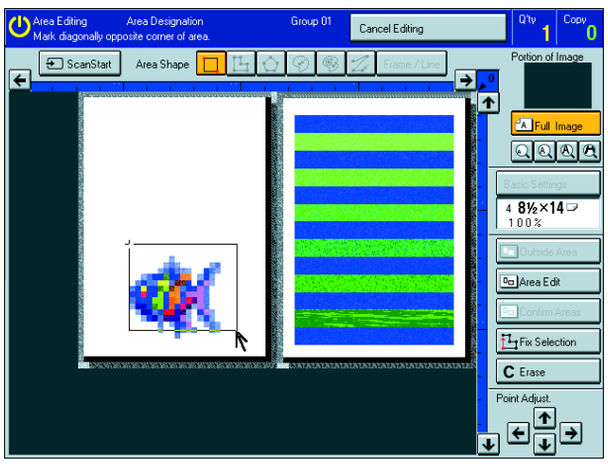


Note

❒ **(Rectangle)** key is selected as default.

3 Mark the first point with the editor pen.

4 Mark the diagonally opposite corner of the area you wish to select.



Note

❒ When you make a mistake, press the **[Erase]** key.

❒ Repeat 4 and 5 to add more rectangles.

❒ When you continue to add areas, you can select other shapes (except Closed Loop Multi-Closed Loop, Line, Frame).

5 Press the **[Confirm Selection]** key.

6 Press the **[Area Edit]** key, specify your settings, then press the **[OK]** key.

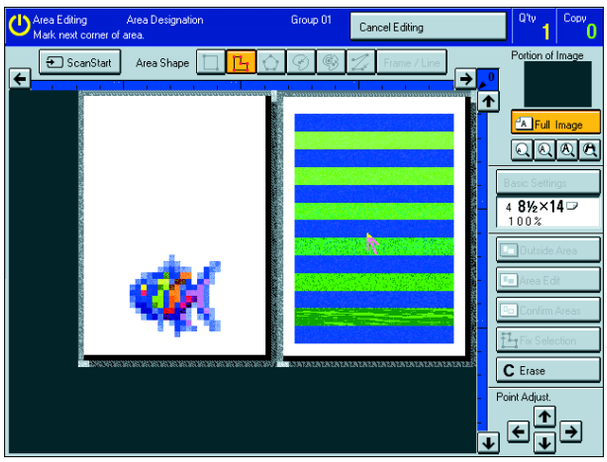
Reference

For details, ☛ see page 152.

7 Press the **[Start]** key.

Right Angle Polygon and Polygon

1. Set your original on the exposure glass.
2. Press the **[Area Editing]** key.
3. Press the **(R.A. Polygon)** or **(Polygon)** key.
4. Mark the first point with the editor pen.
5. Mark the next points.



Note

❒ When you use Right Angle Polygon mode, mark points that make right angles.

6. After making the last point, press the **[Confirm Selection]** key.
7. Press the **[Area Edit]** key, specify your settings, then press the **[OK]** key.

Reference

For details, ☛ see page 152.

8. Press the **[Start]** key.

Closed Loop

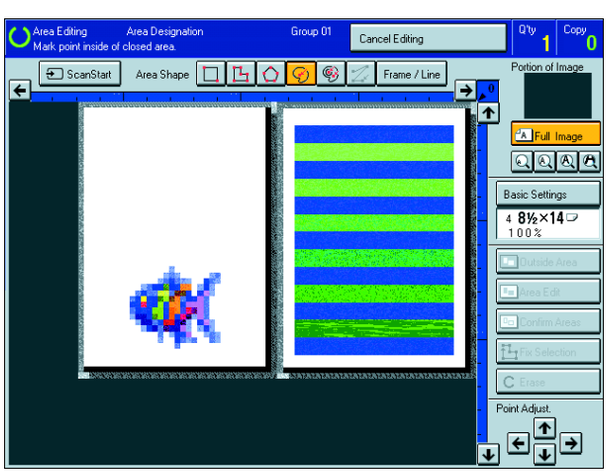
Limitation

❒ If you specify an area with Closed Loop, you cannot specify any additional areas with other selection tools.

Note

❒ When you color areas with the Closed Loop, the area boundary may shift depending on the image.

1. Set your original on the exposure glass.
2. Press the **[Area Editing]** key.
3. Press the **(Closed Loop)** key.
4. Touch on a point inside a closed loop.



5 Press the **[Fix Selection]** key.

6 Press the **[Area Edit]** key, specify your settings, then press the **[OK]** key.

Reference

For details, ☛ see page 152.

7 Press the **[Start]** key.

Multi-Closed Loop

Limitation

❒ If you specify an area with Multi-Closed Loop, you cannot specify any additional areas with other selection tools.

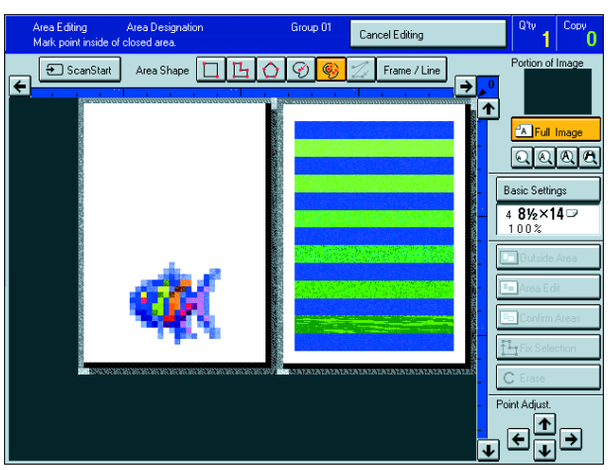
1 Set your original on the exposure glass.

2 Press the **[Area Editing]** key.

3 Press the **(Multi-Closed loop)** key.

4 Press on a point inside the exterior area you wish to specify.

5 Press on a point inside the interior area you wish to treat differently.



Note

❒ Be sure to select a point inside of the exterior area you wish to define.

6 Press the **[Confirm Selection]** key.

7 Press the **[Area Edit]** key, specify your settings, then press the **[OK]** key.

Reference

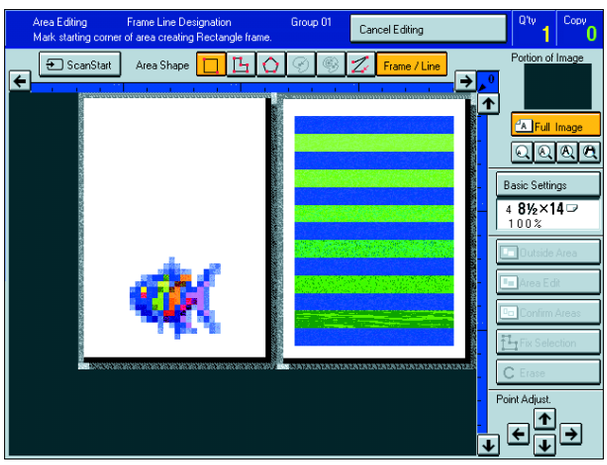
For details, ☛ see page 152.

8 Press the **[Start]** key.

Frame/Line

Rectangle frame

1. Set your original on the exposure glass.
2. Press the **[Area Editing]** key.
3. Press the **[Frame/Line]** key.
4. Press the **(Rectangle)** key.



5. Mark the first point with the editor pen.
6. Mark the diagonally opposite corner of the area you wish to select.
7. Press the **[Confirm Selection]** key.
8. Press the **[Area Edit]** key, specify your settings, then press the **[OK]** key.

Reference

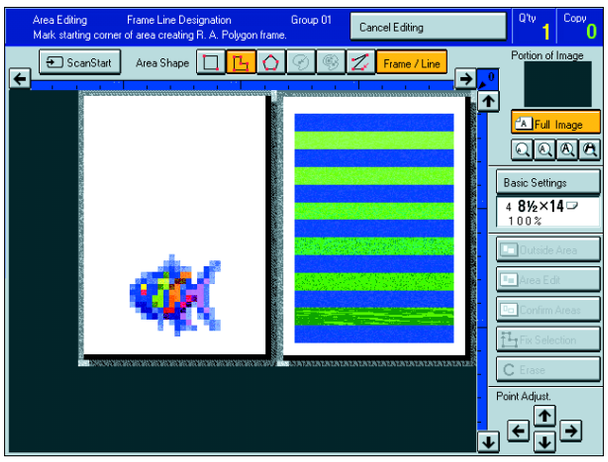
For details, ☛ see page 152.

9. Press the **[Start]** key.

Right Angle Polygon frame and Polygon frame

1. Set your original on the exposure glass.
2. Press the **[Area Editing]** key.
3. Press the **[Frame/Line]** key.

4 Press the **(Right Angle Polygon)** key or the **(Polygon)** key.



5 Mark the first point with the editor pen.

6 Mark the next points.

7 After making the last point, press the **[Confirm Selection]** key.

8 Press the **[Area Edit]** key, specify your settings, then press the **[OK]** key.

Reference

For details, ☛ see page 152.

9 Press the **[Start]** key.

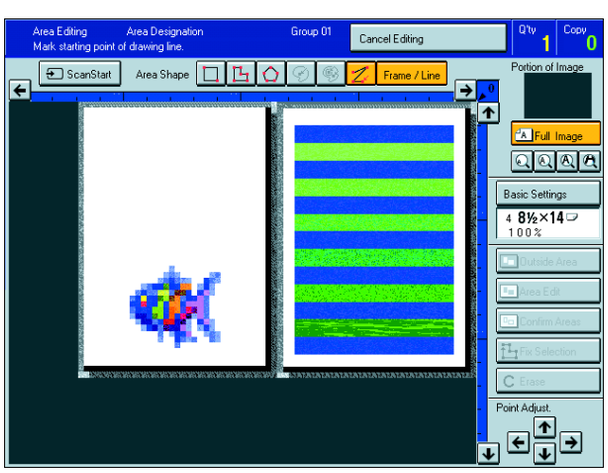
Line

1 Set your original on the exposure glass.

2 Press the **[Area Editing]** key.

3 Press the **[Frame/Line]** key.

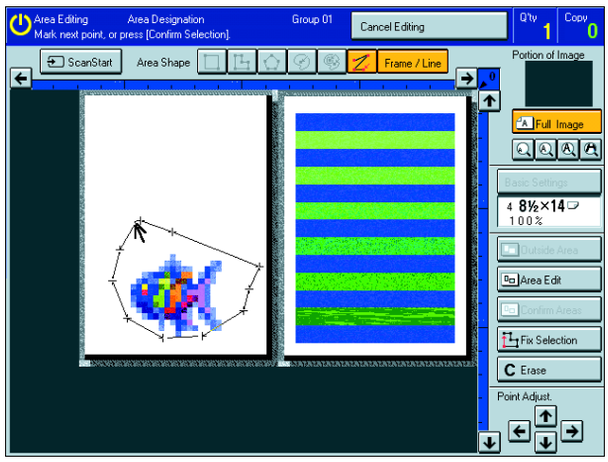
4 Press the **(Line)** key.



5 Mark the first point with the editor pen.

6 Mark the next points.

7 After marking the last point, press the **[Confirm Selection]** key.



8 Press the **[Area Edit]** key, specify your settings, then press the **[OK]** key.

Reference

For details, ☛ see page 152.

9 Press the **[Start]** key.

Notes for Designating Areas

The number of the points, areas, and groups that can be designated

Note

❒ Maximum number of points: 500

❒ In Right Angle Polygon mode, Polygon mode, or Line mode, the maximum number of points for one area is 30.

❒ The number of areas that can be designated is as follows:

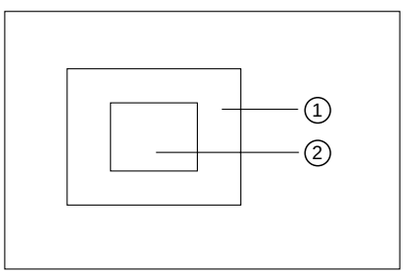
- Rectangle mode: maximum 250 areas
- Right Angle Polygon mode, Polygon mode, Line mode: 500 points maximum. For example, if 10 points are designated for each area, the maximum number of areas that can be designated is 50.
- Closed Loop mode, Multi-Closed Loop mode: maximum 500 areas

❒ Maximum number of groups: 20
(“Group” means a set of areas that you want to do same editions.)

Note

❒ Do not designate an area or line which overlaps part of another area or line. If an area overlaps another one, the job settings specified last will be applied to the overlapped portion or those areas might not be copied.

❒ However, areas containing areas (see below) are permitted. Designate starting with the outermost area.



These operations are available, however, under the following conditions:

- When designating areas with Closed Loop mode, Multi-closed Loop or Line/Frame mode.

❒ If you mark a line and it overlaps another line you have previously marked, the last point you marked will be canceled automatically.

❒ If you designate an area in Right Angle Polygon mode, make sure to mark points that make right angles. If you mark a point which does not match, the editor will automatically correct it to make a right angle.

❒ If you want to designate a triangular area, use Polygon mode.

❒ In Closed Loop mode or Multi-Closed Loop mode, the machine might not detect a closed loop area or multi-closed loop area completely under the following conditions:

- The outline is not completely closed, it is too light to detect, or the thickness is uneven.
- The outline is thinner than 0.3mm.
- The outline is not black.
- The space between two closed loop outlines is less than 1mm.
- The closed loop can be up to 2 meters long.
- The area enclosed by the outline is not white.

❒ The more areas you designate, the more time copying will take.

❒ If you erase an area, group, or job setting, it is cleared from the display. However, the points are still stored in memory and are not cleared until you exit Area Editing. This affects the maximum number of areas you can designate.

❒ Closed Loop mode Multi-Closed Loop mode and Frame/Line mode cannot be used with Rectangle mode, Right Angle Polygon mode, and Polygon mode for one group at a time.

❒ If you need to align areas precisely, you can have a grid shown on the enlarged display. The grid spacing matches the scale of the display.

Selecting Modes for Designated Areas

Reference

The available modes for area editing depend on the area shape. ☛ See page 164.

For functions that cannot be used together in area editing, ☛ see page 164.

More than one mode can be set for designated area, however, there are some limitations, ☛ see page 164. And up to 7 patterns of modes can be set together.

Note

❒ Up to 20 groups of multiple areas can be edited. All the areas should belong to groups 1 ~ 20.
You can select up to seven job patterns for at most 20 groups. After you have set seven patterns, the copier will only allow you to choose the pattern of a previous group.
If you change the settings for one group, it will change the settings for all other groups with the same job pattern. However, if you have set a Paint, Color Background, or Frame/ Line, changing the color in one group will not affect other groups. (Up to 15 colors can be selected.)

❒ The modes that can be set for inside areas as follows:

- Color/Image Adjustment: Image Density, Color Mode, Original Type, Image Adjustment, Color Adjustment, Color Balance Adjustment
- Color Creation: Color Conversion, Color Erase, Color Background, Paint, Type Mask
- Image Creation: Outline Image, Shadow Image, Slanted Image, Mirror Image, Positive/Negative

Note

❒ The editing functions available when specifying area with Frame/Line mode are Width and Color.

❒ Color/Image Adjustment's default setting:

- Image Density - Manual Image Density
- Color Mode - Black
- Original Type - Text

❒ You can change the default settings. ☛ See page 187.

❒ Depending on the shapes of the areas, coloring or deleting near the outlines of the areas might not do well, or the outlines might become uneven.

❒ The way to set modes is basically the same as for the entire image. For details, refer to each page.

- To fill an area with a selected color, select the Paint.
- Image Density ☛ See page 39.
- Original Type ☛ See page 44.
- Color Adjustment ☛ See page 131.
- Color Conversion ☛ See page 85.
- Type Mask ☛ See page 89.
- Color Background ☛ See page 88.
- Outline Image ☛ See page 91.
- Slanted Image ☛ See page 95.
- Positive/Negative ☛ See page 101.
- Color Mode ☛ See page 40.
- Image Adjustment ☛ See page 132.
- Color Balance Adjustment ☛ See page 124.
- Color Erase ☛ See page 87.
- Shadow Image ☛ See page 92.
- Mirror Image ☛ See page 96.
- Save Area ☛ See page 154.
- Changing Job Settings for the Entire Image ☛ See page 158.
- Change Modes ☛ See page 159.
- Adding Areas ☛ See page 160.
- Erasing a Group ☛ See page 162.

Area Shapes

Basic modes

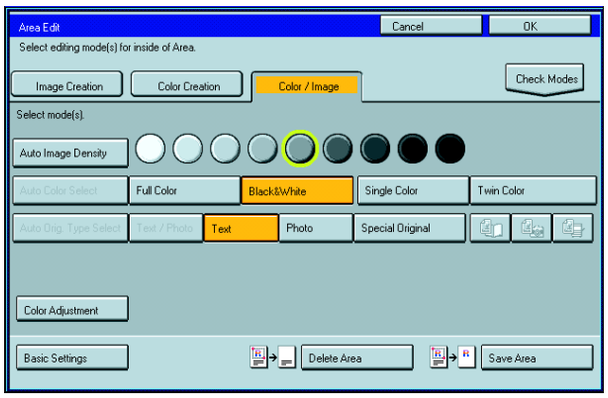
1 Designate the areas you wish to modify.

Note

❒ For designating areas, ☛ see page 145.

2 Press the **[Area Edit]** key.

3 Press the **[Color/Image]**, **[Color Creation]** or **[Image Creation]** key.



4 Set the desired modes.

Note

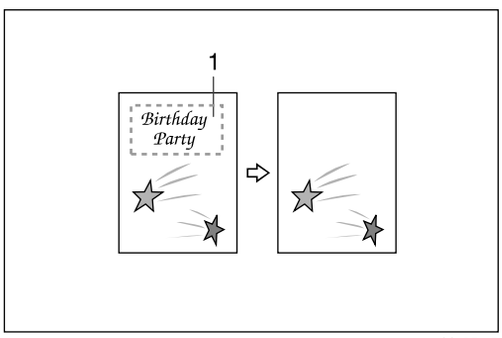
- ❒ Color/Image, ☛ see page 121.
- ❒ Color Creation, ☛ see page 85.
- ❒ Image Creation, ☛ see page 91.

5 Press the **[OK]** key.

6 Press the **[Start]** key.

Delete Area—Erasing a Part of the Image

This function blanks out designated areas.



1: Designated area

Note

- ❒ When you select Delete Area mode, previously selected modes are canceled.

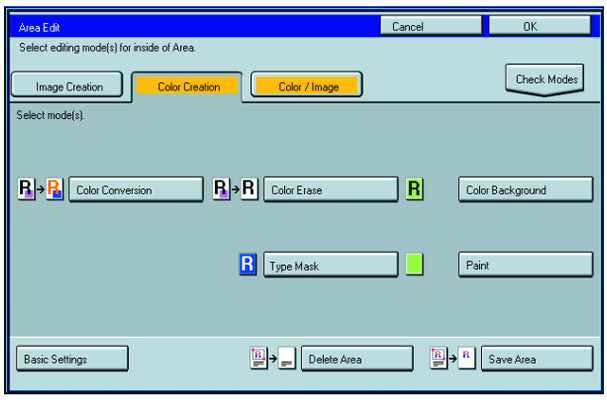
1 Designate the areas you wish to modify.

2 Press the **[Area Edit]** key.

Note

❒ For designating areas, ☛ see page 152.

3 Press the **[Delete Area]** key.

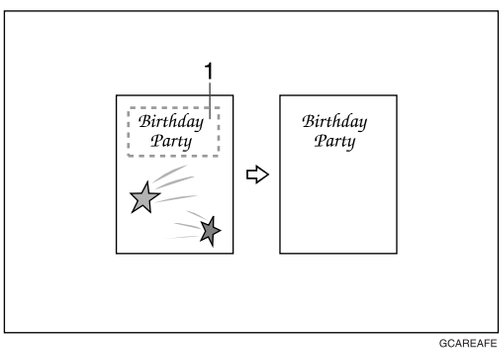


4 Press the **[OK]** key.

5 Press the **[Start]** key.

Save Area—Blanking out Part of the Image

This function blanks out all areas except those designated.



1: Designated area

Note

❒ When you select Save Area mode, previously selected modes are canceled.

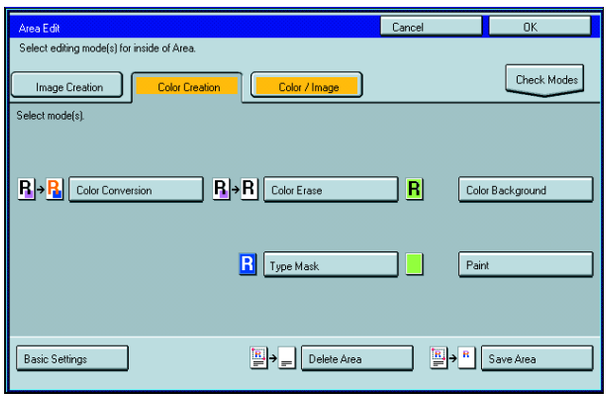
1 Designate the areas you wish to modify.

Note

❒ For designating areas, ☛ see page 145.

2 Press the **[Area Edit]** key.

3 Press the **[Save Area]** key.



4 Press the **[OK]** key.

5 Press the **[Start]** key.

Frame/Line

Editing color and widths

Note

- ❒ Frame/Line mode do not work with other modes.
- ❒ Frame/Line widths:

  Metric version: 0.25 ~ 2.0mm (in 0.25mm steps)

  Inch version: 0.01" ~ 0.08" (in 0.01" steps)
- ❒ The frame and line width might be uneven depending on the angle of the line.

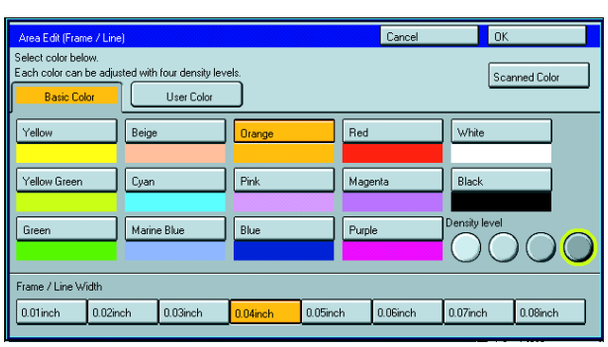
1 Designate the areas you wish to modify.

Note

- ❒ For designating areas, ☛ see page 145.

2 Press the **[Area Edit]** key.

3 Select the color and widths.



4 Press the **[OK]** key.

Selecting Modes for Outside Designated Areas

Reference

The available modes for area editing depend on the area shape. ☛ See page 164.

For functions that cannot be used together in area editing, ☛ see page 164.

More than one mode can be set, however, there are some limitations, ☛ see page 164.

The modes that can be set for outside areas as follows:

- Color/Image Adjustment: Image Density, Color Mode, Original Type, Image Adjustment, Color Adjustment, Color Balance Adjustment
- Color Creation: Color Conversion, Color Erase, Color Background, Paint, Type Mask
- Image Creation: Outline Image, Shadow Image, Positive/Negative

Note

❒ Color/Image Adjustment's default setting:

- Copy Image Density Adjustment - Manual Image Density
- Color Mode - Black
- The Original Image Type - Photo/Text

❒ You can change the default settings. ☛ See page 187.

❒ The way to set modes is basically the same as for the entire image. For details, refer to each page.

- To fill an area with a selected color, select the Paint.
- Image Density ☛ See page 39.
- Original Type ☛ See page 44.
- Color Adjustment ☛ See page 131.
- Color Conversion ☛ See page 85.
- Color Background ☛ See page 88.
- Type Mask ☛ See page 89.
- Outline Image ☛ See page 91.
- Positive/Negative ☛ See page 101.
- Color Mode ☛ See page 40.
- Image Adjustment ☛ See page 132.
- Color Balance Adjustment ☛ See page 124.
- Color Erase ☛ See page 87.
- Shadow Image ☛ See page 92.
- Save Area ☛ See page 154.

Area Shapes

Basic modes

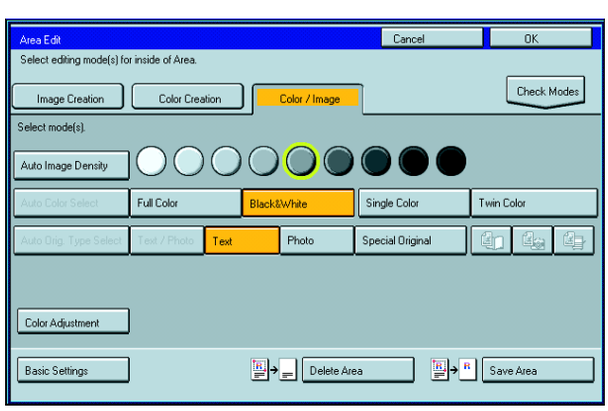
1 Designate the areas you wish to modify.

Note

❒ For designating areas, ☛ see page 145.

2 Press the **[Area Edit]** key.

3 Press the **[Color/Image]**, **[Color Creation]** or **[Image Creation]** key.



4 Set the desired modes.

Note

- ❒ Color/Image, ☛ see page 121.
- ❒ Color Creation, ☛ see page 85.
- ❒ Image Creation, ☛ see page 91.
- ❒ Basic Settings, ☛ see page 158.

5 Press the **[OK]** key.

6 Press the **[Start]** key.

Save Area

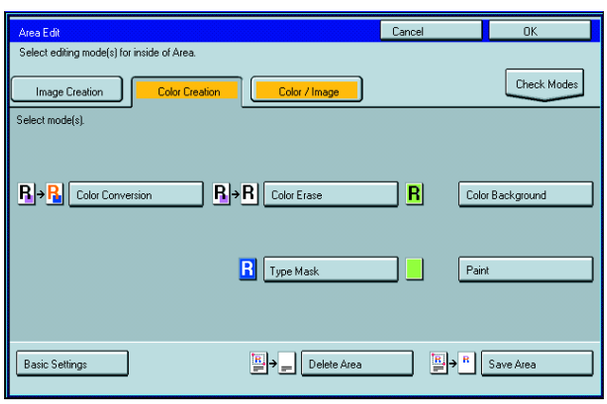
1 Designate the areas you wish to modify.

Note

For designating areas, ☛ see page 145.

2 Press the **[Area Edit]** or **[Outside Area]** key.

3 Press the **[Save Area]** key.



4 Press the **[Start]** key.

Changing Job Settings for the Entire Image

You can change job settings for the entire image during area editing.

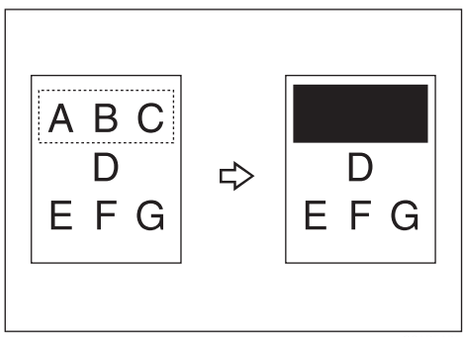
❒ The job settings that can be changed are as follows:

- Paper Select, ☛ see page 47.
- Reduce/Enlarge (Preset R/E, Zoom, Size Magnification, Directional Magnification, Poster Mode), ☛ see page 59.
- Shift, ☛ see page 77.
- Margin Adjustment, ☛ see page 78.
- Sort/Stack/Staple (Option), ☛ see page 102.

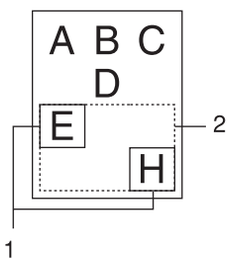
Note

❒ Regarding functions that cannot be used together in area editing, ☛ see page 164.

❒ When you set Shift and designate more than one area in this mode, the minimum size rectangle that includes all the designated areas is shifted as follows:



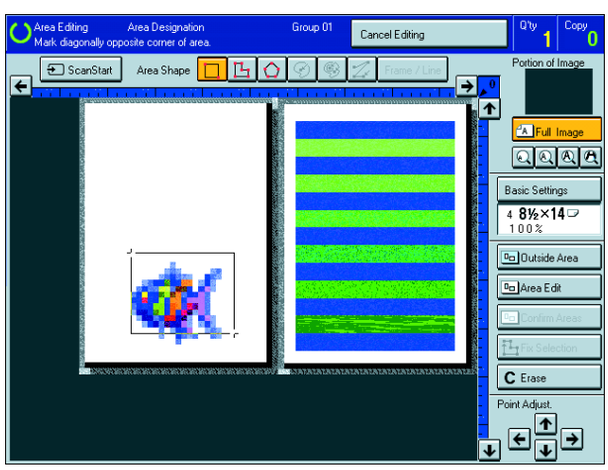
GCAREADE



GCAREABE

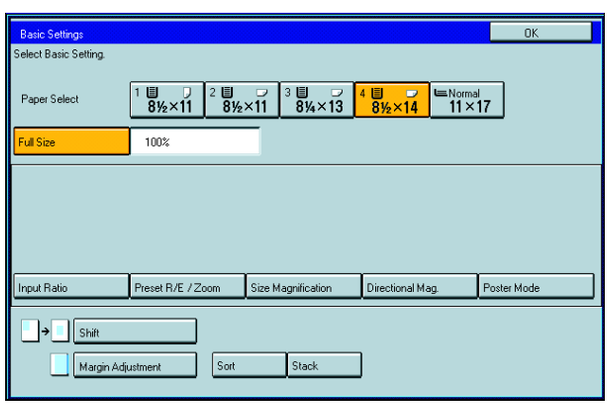
1: Designated area
2: Area that will be shifted

1 Press the **[Basic Settings]** key.



2 Change the job settings.

3 Press the **[OK]** key.



Checking and Changing Areas

Use this function to check the areas you have selected and the modes you have chosen for each area.

You can:

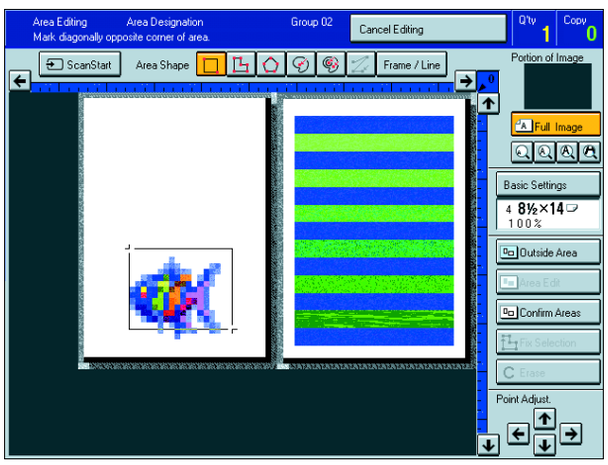
- Change the modes for an area/Group
- Add an area to a Group
- Erase an area
- Erase a Group

Note

❒ Note that even if you erase a job setting, a group, or an area, they still consume memory until you exit Area Editing.

Change Modes

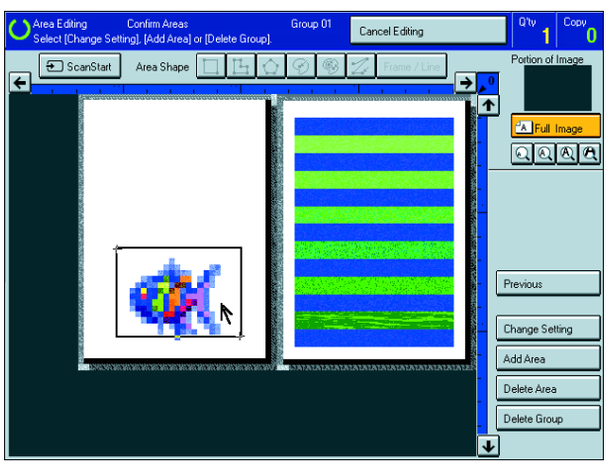
1 Press the **[Confirm Areas]** key.



Note

❒ All designated areas are displayed.

2 Select an area or a group.

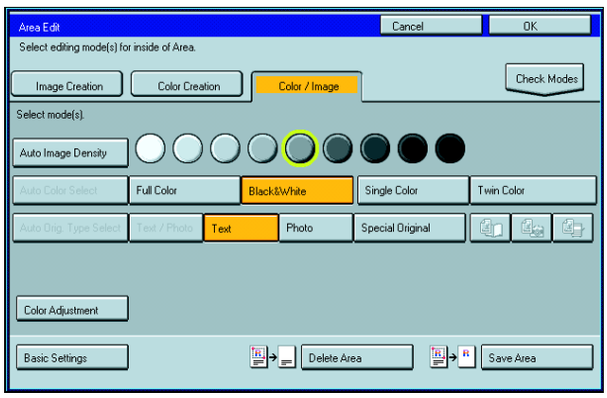


Note

❒ Areas in this group are highlighted.

3 Press the **[Change Setting]** key.

4 Change the modes, then press the **[OK]** key.



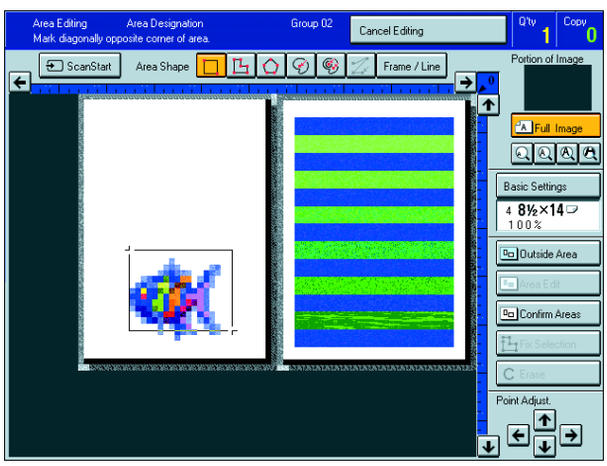
Note

- Color/Image, ☛ see page 121.
- Color Creation, ☛ see page 85.
- Image Creation, ☛ see page 91.
- Color Adjustment, ☛ see page 130.
- Basic Settings, ☛ see page 158.
- Delete Area, ☛ see page 153.
- Save Area, ☛ see page 154.

5 Press the **[Previous]** key.

Adding Areas

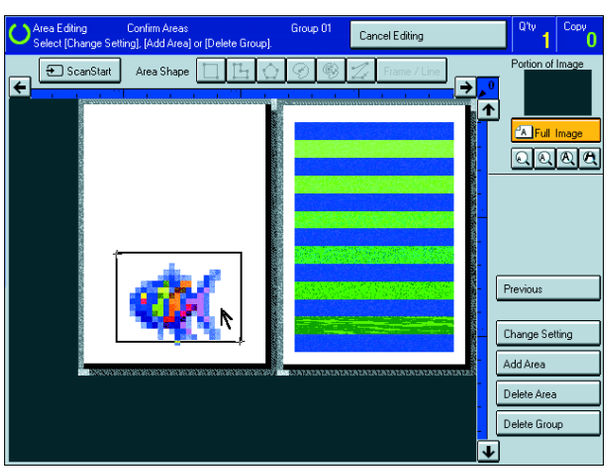
1 Press the **[Confirm Areas]** key.



Note

- The all designated areas are displayed.

2 Select an area or a group.



Note

- Areas in this group are highlighted.

3 Press the **[Add Area]** key.

4 Select the area shape.

5 Designate areas, then press the **[Confirm Areas]** key.

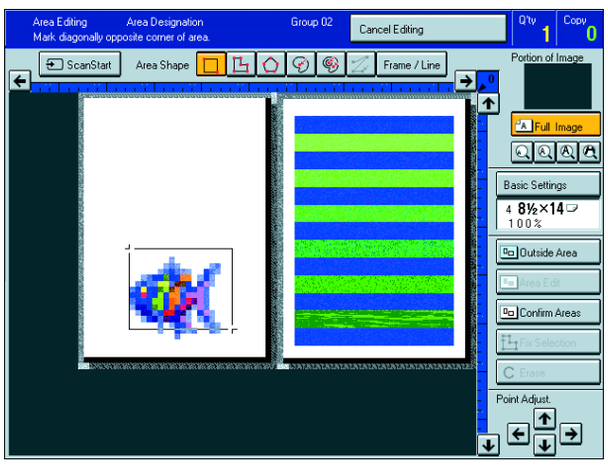
Note

❒ For designating areas, ☛ see page 145.

6 Press the **[Previous]** key.

Erasing an Area

1 Press the **[Confirm Areas]** key.

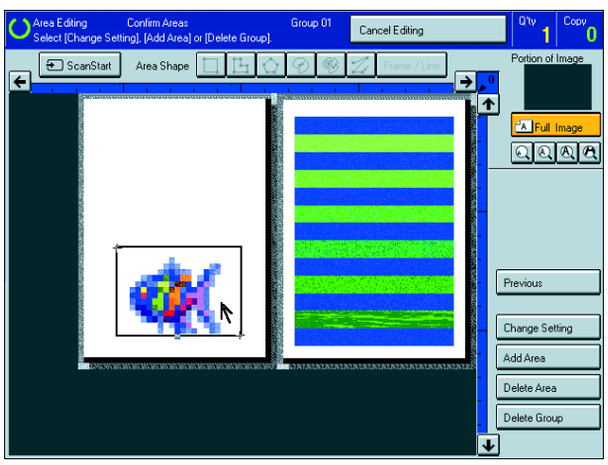


Note

❒ All designated areas are displayed.

2 Select an area that you want to cancel.

3 Press the **[Delete Area]** key.



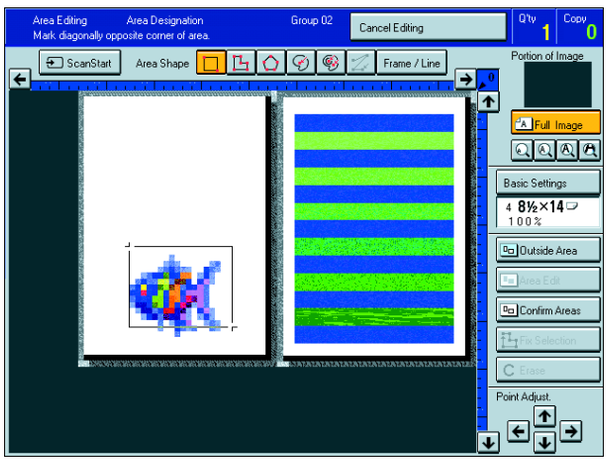
4 Press the **[Yes]** key.



5 Press the **[Previous]** key.

Erasing a Group

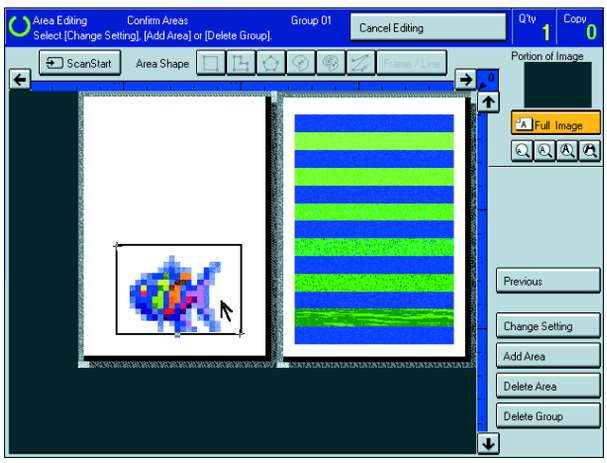
1 Press the **[Confirm Areas]** key.



Note

❒ All designated areas are displayed.

2 Select a group that you want to cancel.



Note

❒ Areas in this group are highlighted.

3 Press the **[Delete Group]** key.

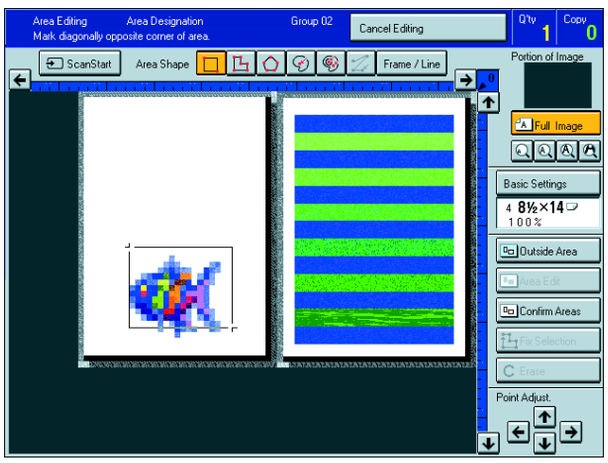
4 Press the **[Yes]** key.



5 Press the **[Previous]** key.

Exiting Area Editing

1 Press the **[Cancel Editing]** key.



2 Press the **[Yes]** key.



Combination Chart for Area Editing

① Functions available for designated areas.

② Functions available for areas outside designated areas.

③ Functions that can be selected together in an area.

④ Functions available with each shape.

⑤ Functions available for the entire image.

		①	②	③ Newly selected mode: Density: Auto Image Density	Density: Manual Image Density	Color Mode: Full Color	Color Mode: Black & White	Color Mode: Single Color	Color Mode: Twin Color	Color Creation: Original Image Type Selection	Color Creation: Type Mask	Color Creation: Color Conversion	Color Creation: Color Erase	Color Creation: Color Background	Color Creation: Paint	Image Creation: Outline Image	Image Creation: Shadow Image	Image Creation: Slanted Image	Image Creation: Mirror Image	Image Creation: Positive/Negative
Image Density	Auto Image Density	★	☆		☆	→	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆
	Manual Image Density	☆	☆	☆		☆	☆	☆	☆	☆	→	☆	☆	☆	→	☆	☆	☆	☆	☆
Color Mode	Full Color	★	☆	✗	☆		→	→	→	☆	☆	☆	☆	☆	→	☆	☆	☆	☆	☆
	Black & White	★	☆	☆	☆	→		→	→	☆	→	☆	☆	☆	→	☆	☆	☆	☆	☆
	Single Color	★	☆	☆	☆	→	→		→	☆	→	☆	☆	☆	→	☆	☆	☆	☆	☆
	Twin Color	★	☆	☆	☆	→	→	→		☆	→	☆	☆	☆	→	✗	☆	☆	☆	☆
Original Image Type Selection		★	☆	☆	☆	☆	☆	☆	☆		→	☆	☆	☆	→	☆	☆	☆	☆	☆
Color Creation	Type Mask	★	☆	☆	✗	☆	✗	✗	✗	☆		→	→	→	→	✗	☆	☆	☆	☆
	Color Conversion	★	☆	☆	☆	☆	✗	✗	✗	☆	→		☆	☆	→	✗	☆	☆	☆	☆
	Color Erase	★	☆	☆	☆	☆	☆	☆	✗	☆	→	☆		☆	→	✗	☆	☆	☆	☆
	Color Background	★	☆	☆	☆	☆	☆	☆	☆	☆	→	☆	☆		→	✗	☆	☆	☆	☆
	Paint	★	☆	✗	✗	✗	✗	✗	✗	✗	→	→	→	→		✗	✗	✗	☆	☆
Image Creation	Outline Image	★	☆	☆	☆	☆	☆	☆	✗	✗	✗	✗	✗	✗	✗		☆	☆	☆	☆
	Shadow Image	★	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	✗	☆		☆	☆	☆
	Slanted Image	★	✗	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	✗	☆	☆		☆	☆
	Mirror Image	★	✗	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	→	☆	☆	☆		☆
	Positive/Negative	★	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	
Image Adjustment	Soft/Sharp	★	☆	☆	☆	☆	☆	☆	☆	☆	→	☆	☆	☆	→	→	☆	☆	☆	☆
	Contrast	★	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆
	Background Density	★	☆	☆	☆	☆	☆	☆	☆	☆	→	☆	☆	☆	☆	→	☆	☆	☆	☆
	Pastel	★	☆	☆	☆	☆	☆	☆	☆	☆	→	☆	☆	☆	☆	→	☆	☆	☆	☆
	U.C.R Adjustment	★	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆
	Text/Photo Sensitivity	✗	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆
	Color Adjustment	★	☆	☆	☆	☆	→	→	→	☆	→	☆	☆	☆	→	→	☆	☆	☆	☆
	Color Balance Adjustment	★	☆	☆	☆	☆	☆	☆	☆	☆	→	☆	☆	☆	☆	→	☆	☆	☆	☆
	Save Area	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆
	Delete Area	☆	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
	Preset Reduce/Enlarge / Zoom	✗	✗																	
	Size Magnification	✗	✗																	
	Directional Magnification	✗	✗																	
	Poster Mode	✗	✗																	
	Auto Reduce/Enlarge	✗	✗																	
	Centering/Cornering, Margin Adjustment	✗	✗																	
	Center Erase, Center/Border Erase, Border Erase	✗	✗																	
	Duplex/Combine	✗	✗																	
	Auto Paper Select	✗	✗																	
	Bypass Tray Copying	✗	✗																	
	Program	✗	✗																	
	Interrupt Copying	✗	✗																	
	Sort/Stack/Staple (Option)	✗	✗																	

☆ : These modes can be used together.
★ : These modes can be used together with some limitations.
→ : The original mode is overridden and only the newly selected mode is active.
✗ : These modes cannot be used together.

		③ Newly selected mode: Image Adjustment: Soft/Sharp	Contrast	Background Density	Pastel	U.S.R. Adjustment	Text/Photo Sensitivity	Color Adjustment	Color Balance Adjustment	Save Area	Delete Area	④: Rectangle	Right Angle Polygon	Polygon	Closed Loop	Multi Closed Loop	Line	Rectangle frame	Right Angle Polygon frame	Polygon frame	⑤
Image Density	Auto Image Density	☆	☆	☆	☆	☆	☆	☆	☆	☆	→	☆	☆	☆	☆	☆	–	–	–	–	
	Manual Image Density	☆	☆	☆	☆	☆	☆	☆	☆	☆	→	☆	☆	☆	☆	☆	–	–	–	–	
Color Mode	Full Color	☆	☆	☆	☆	☆	☆	☆	☆	☆	→	☆	☆	☆	☆	☆	–	–	–	–	
	Black & White	☆	☆	☆	☆	☆	☆	✗	☆	☆	→	☆	☆	☆	☆	☆	–	–	–	–	
	Single Color	☆	☆	☆	☆	☆	☆	✗	☆	☆	→	☆	☆	☆	☆	☆	–	–	–	–	
	Twin Color	☆	☆	☆	☆	☆	☆	✗	☆	☆	→	☆	☆	☆	☆	☆	–	–	–	–	
Original Image Type Selection		☆	☆	☆	☆	☆	☆	☆	☆	☆	→	☆	☆	☆	☆	☆	–	–	–	–	
Color Creation	Type Mask	✗	☆	✗	✗	☆	✗	✗	✗	☆	→	☆	☆	☆	✗	✗	–	–	–	–	
	Color Conversion	☆	☆	☆	☆	☆	☆	☆	☆	☆	→	☆	☆	☆	✗	✗	–	–	–	–	
	Color Erase	☆	☆	☆	☆	☆	☆	☆	☆	☆	→	☆	☆	☆	✗	✗	–	–	–	–	
	Color Background	☆	☆	☆	☆	☆	☆	☆	☆	☆	→	☆	☆	☆	☆	☆	–	–	–	–	
	Paint	✗	☆	✗	☆	☆	✗	✗	☆	☆	→	☆	☆	☆	☆	☆	–	–	–	–	
Image Creation	Outline Image	✗	☆	✗	✗	☆	☆	✗	✗	☆	→	☆	☆	☆	✗	✗	–	–	–	–	
	Shadow Image	☆	☆	☆	☆	☆	☆	☆	☆	☆	→	☆	☆	☆	✗	✗	–	–	–	–	
	Slanted Image	☆	☆	☆	☆	☆	☆	☆	☆	☆	→	☆	✗	✗	✗	✗	–	–	–	–	
	Mirror Image	☆	☆	☆	☆	☆	☆	☆	☆	☆	→	☆	✗	✗	✗	✗	–	–	–	–	
	Positive/Negative	☆	☆	☆	☆	☆	☆	☆	☆	☆	→	☆	☆	☆	✗	✗	–	–	–	–	
Image Adjustment	Soft/Sharp		☆	☆	☆	☆	☆	☆	☆	☆	→	☆	☆	☆	☆	☆	–	–	–	–	
	Contrast	☆		☆	☆	☆	☆	☆	☆	☆	→	☆	☆	☆	☆	☆	–	–	–	–	
	Background Density	☆	☆		☆	☆	☆	☆	☆	☆	→	☆	☆	☆	☆	☆	–	–	–	–	
	Pastel	☆	☆	☆		☆	☆	☆	☆	☆	→	☆	☆	☆	☆	☆	–	–	–	–	
	U.C.R Adjustment	☆	☆	☆	☆		☆	☆	☆	☆	→	☆	☆	☆	☆	☆	–	–	–	–	
	Text/Photo Sensitivity	☆	☆	☆	☆	☆		☆	☆	☆	→	☆	☆	☆	☆	☆	–	–	–	–	
	Color Adjustment	☆	☆	☆	☆	☆	☆		☆	☆	→	☆	☆	☆	☆	☆	–	–	–	–	
	Color Balance Adjustment	☆	☆	☆	☆	☆	☆	☆		☆	→	☆	☆	☆	☆	☆	–	–	–	–	
	Save Area	☆	☆	☆	☆	☆	☆	☆	☆		☆	✗	✗	✗	✗	✗	–	–	–	–	
	Delete Area	✗	✗	✗	✗	✗	✗	✗	✗	✗		☆	☆	☆	☆	☆	–	–	–	–	
	Preset Reduce/Enlarge / Zoom																				☆
	Size Magnification																				☆
	Directional Size Magnification																				☆
	Poster Mode																				☆
	Auto Reduce/Enlarge																				✗
	Centering/Cornering, Margin Adjustment																				☆
	Center Erase, Center/Border Erase, Border Erase																				✗
	Duplex/Combine																				✗
	Auto Paper Select																				✗
	Bypass Tray Copying																				☆
	Program																				☆
	Interrupt Copying																				✗
	Sort/Stack/Staple (Option)																				☆

What to do if Something Goes Wrong

If Your Machine Does not Operate as You Want

Check the following:

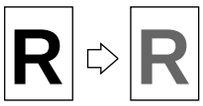
Condition	Action
Nothing happens when the operation switch is turned on.	Is the main power switch turned on? →Turn on the main power switch.
Paper tray is empty.	Load paper. ☛ See page 172.
Toner container is almost empty. Or toner container is empty.	Add toner. ☛ See page 175.
Doors/covers are open.	Close the doors/covers.
Misfeed occurs.	Remove misfed paper. ☛ See page 177.
The machine instructs you to add staples.	Add staples. ☛ See page 179.
The machine instructs you to enter your user code.	The machine is set for User Code mode. Enter your user code. ☛ See page 196.
The **Energy Saver** indicator is on.	Your machine is under the energy saver condition. →Press the **【Energy Saver】** key. ☛ See page 55.
Misfeeds occur frequently.	Is the right kind of paper in the paper tray? →Paper size and weight must be within the specifications for this machine.
	Is folded, wrinkled, damp, or curled paper in the paper tray? →Always use dry, undamaged paper.
	Is the paper properly set in the paper tray? →Always load paper correctly.
	Are there any pieces of misfed paper or other foreign objects in the machine? →Make sure that the paper path is completely clear of paper and other material after a misfeed.
Staples do not come out at all.	There are jammed staples in the stapler. →Remove the jammed staples. ☛ See page 181.
	After loading a new staple cartridge, staples might not be ejected the first few times you try to use the stapler.
or or is lit	Contact your service representative.
The machine cannot detect the original size.	Set custom size original on the exposure glass.
	Input the both horizontal and vertical sizes of the custom original. ☛ See page 50.
	Select paper manually, not in Auto Paper Select mode.
	Do not use Auto Reduce/Enlarge mode.
	Set your originals.
The machine instructs you to check the original direction.	Set the original in the same direction as the copy paper.
The machine instructs you to check paper size.	Select the proper paper size.
The machine cannot sort this size paper.	Select the proper paper size that can be used in Sort mode. ☛ See page 102.
The machine cannot stack this size paper.	Select the proper paper size that can be used in Stack mode. ☛ See page 103.

Condition	Action
You cannot enter the desired copy set number.	You can change the maximum copy quantity that you can make at a time. ☛ See page 195.
The machine instructs you to set the duplex tray.	Reset the duplex tray correctly. ☛ See page 2.
The machine instructs you to wait.	Wait for the machine to warm-up.
The panel display is off.	Press the **[Energy Saver]** key to cancel Energy Saver mode.
	Turn on the operation switch.
	Adjust the Screen Contrast. ☛ See page 5.

❒ If you cannot correct the problem by taking the above actions, please contact your service representative.

If You Cannot Make Copies as You Want

Problem	Cause	Action
Copies appear dirty.	The image density is too dark.	Adjust the image density. ☛ See page 39.
		Adjust the background density. ☛ See page 132.
	The exposure glass (platen glass) or document feeder belt is dirty.	Clean them. ☛ See page 200.
The reverse side of an original image is copied.	The image density is too dark.	Adjust the image density. ☛ See page 39.
		If you select Black & White Copy mode or Single Color mode, place a black paper in the backside of the original and select Auto Image Density mode.
		Lighten the background density. ☛ See page 132.
A shadow is copied when copying a pasted original.	The image density is too dark.	Adjust the image density. ☛ See page 39.
		Adjust the background density. ☛ See page 132.
		Set the original in a different direction.
		Put mending tape on the bound part.
Copies are too light.	The original has a low contrast image.	Adjust the image density. ☛ See page 39.
	The image density is too light.	
	Damp or rough grain paper is used	Use dry paper without rough grain.
Copy image is not clear.	The original image type is not selected properly.	Select the proper original image type. ☛ See page 44.
		Adjust the sharpness of the image with the Soft/Sharp function. ☛ See page 132.
The same copy area is dirty whenever making copies.	The exposure glass (platen glass) or document feeder belt is dirty.	Clean them. ☛ See page 200.
When using Enlarge mode, shadows appear on the margins of copies.	Shadows may appear because the whole surface area of the exposure glass was scanned in.	Select the Border Erase mode. ☛ See page 81.
Copies are blank or parts of the image are not copied.	The original is not set correctly.	Set the originals correctly. ☛ See page 31, 32 or 33.
	An improper paper size is selected.	Select the proper paper size.
	The selected reproduction ratio does not match the paper size.	Select the proper reproduction ratio.

Problem	Cause	Action
A moire pattern is produced on copies as shown in the illustration. 	The Text mode is selected.	Select Auto Original Type Select mode or Photo mode. ☛ See page 44.
	The line images of the original might be overlapped each other.	Place the original on the exposure glass (platen glass) at a slight angle.
		Adjust the sharpness of the image. ☛ See page 132.
Color tone of copies is different from that of originals.	The color balance is not set properly.	Adjust the Color Balance. ☛ See page 124.
		Perform the Auto Color Calibration (A.C.C.). ☛ See page 198.
Color tone of copies is completely different from that of originals.	Unsuitable color setting.	Perform Auto Color Calibration (A.C.C.). ☛ See page 198. If you cannot correct the problem by performing Auto Color Calibration, contact your service representative.
Letter parts and photo parts of an original are not separated correctly.	An original has screen letters or low density letters.	Adjust the Text/Photo Sensitivity to a "Text" level. ☛ See page 132.
	An original has a high contrast photo.	Adjust the Text/Photo Sensitivity to a "Photo" level. ☛ See page 132.
	An original has a photo having sequence thin lines with regular thin spaces.	
Color parts of an original are copied in black in Auto Color Select mode.	There are small or thin color parts.	Adjust the A.C.S. Sensitivity to a "Full color" level. ☛ See page 132.
Non-color parts of an original are copied in color in Auto Color Select mode.	The machine might detect some black and white screen images (such as from newspaper) as a full color original.	Select Black & White mode. ☛ See page 40.
		Adjust the A.C.S. Sensitivity to a "B&W" level. ☛ See page 132.
A copy image is blurred.	The image density is too light.	Adjust the image density. ☛ See page 39.
	An improper kind of paper is set.	Set the right kind of paper in the paper tray. **Note** ❒ Copies might be blurred if you copy onto rough grain, coated, or damp paper.
	Toner is running out.	Add toner. ☛ See page 175.
In Margin Adjustment mode, parts of the original image are not copied.	The margin is set too wide.	Set the narrow margin with the user tools. ☛ See page 195.
In Repeat Image mode, the original image is not copied repeatedly.	An improper reproduction ratio is selected.	Select the proper reproduction ratio.

❒ If you cannot correct the problem by taking the above actions, please contact your service representative.

Loading Paper

Reference

Regarding paper sizes that can be set, ☛ see page 238.

Note

❒ If you want to change the paper size, ☛ see page 184.

Non-recommended Paper for Paper Trays

❒ Folded, curled, creased, or damaged paper

❒ Torn paper

❒ Perforated paper

❒ Paper with conductive or low electrical resistance coating such as carbon or silver coating

❒ Thermal paper, art paper

❒ Thin paper that has low stiffness

❒ Damp paper

❒ Wavy paper

❒ Stapled paper

❒ Translucent paper

❒ OHP transparencies

Note

❒ Load paper with the side you wish to copy onto face-down in the paper trays. If copies are curled, try turning the copy paper over in the tray. If there is no improvement, change to copy paper with less curl.

❒ Correct curls in copy paper before loading.

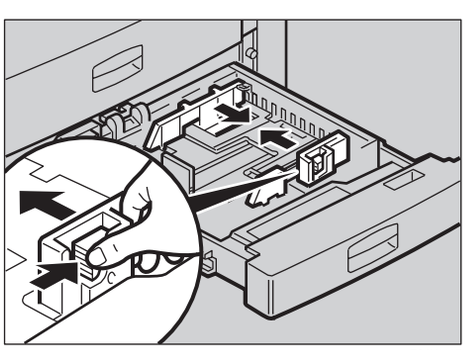
❒ Fan copy paper to get air between the sheets before loading.

❒ When making 2-sided copies, do not load paper in the paper tray to copy on the reverse side. Use the bypass tray. ☛ See page 52.

Loading Paper in the Paper Tray

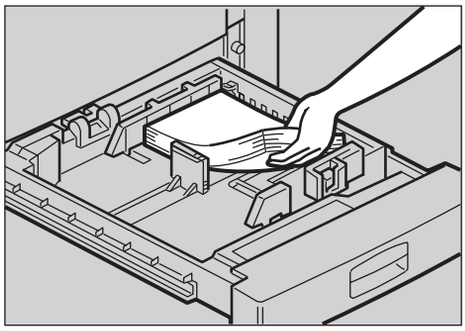
1. Pull out the paper tray until it stops.

2. While pressing the lock lever, open the side fences.



TCAY060E

3 Square the paper and set it in the tray.



TCAY050E

Note

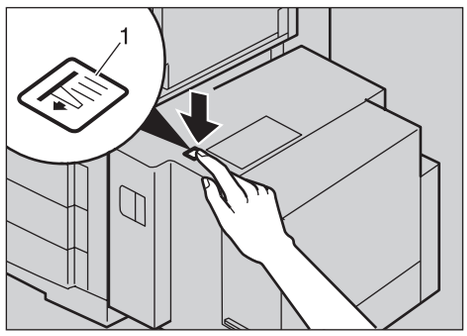
- ❒ Do not stack paper over the limit mark.
- ❒ Make sure that the leading corners of the paper are under the corners.

4 Reinstall the side fences.

5 Push the paper tray in until it stops.

Loading Paper in the Large Capacity Tray

1. Press the **[Down]** key if it is not lit.



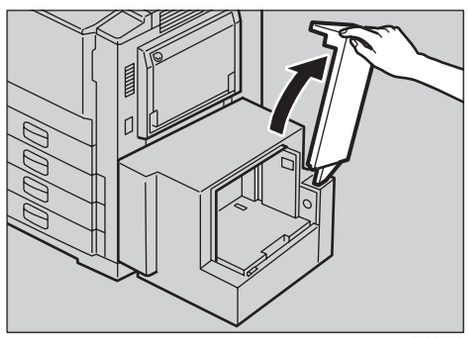
TCAP020E

1: Down key

Note

❒ The key blinks while the bottom plate is moving down.

2. When the key stops blinking and lights up, open the top cover.

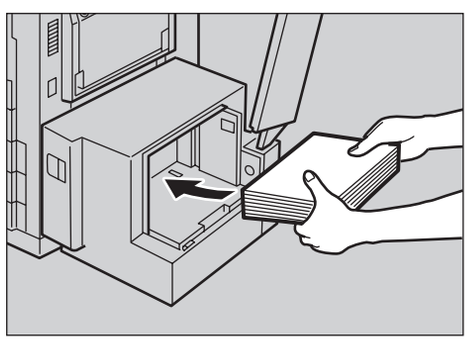


TCAP030E

Note

❒ Make sure no paper sheet is involved in the feeding part of the Large Capacity Tray. Remove the sheet, if any.

3. Place the paper in the tray along the edge on the left.



TCAP040E

Note

❒ The Tray contains up to 1,500 sheets.

4. Close the top cover.

Adding Toner

There are four kinds of toner (Cyan, Magenta, Yellow, and Black). When is lit, it is time to add toner.

⚠***WARNING:***

- ***Do not incinerate used toner or toner containers. Toner dust might ignite when exposed to an open flame. Dispose of the used toner containers according to local regulations for plastics.***

⚠***CAUTION:***

- *Do not eat or swallow toner.*
- *Keep toner (used or unused) and toner containers out of reach of children.*

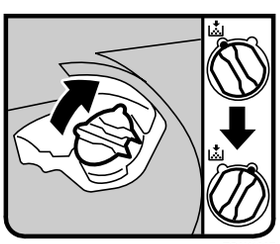
⚠***CAUTION:***

- *This machine has been tested for safety using this supplier's parts and consumables. We recommend you only use these specified supplies.*

Note

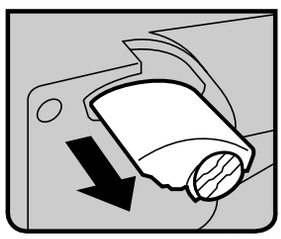
- ❒ If you use toner other than that recommended, a fault might occur.
- ❒ When adding toner, do not turn off the operation switch. If you do, your settings are cleared.
- ❒ Always add toner after the machine instructs you to add toner.
- ❒ Do not use used toner. This will damage the machine.
- ❒ Be sure to add the correct color toner.
- ❒ You can still make about 20 copies after appears. This is a good time to get a new toner cartridge ready.

1. Open the front cover of the machine.
2. Turn the knob clockwise to the position shown in the diagram.

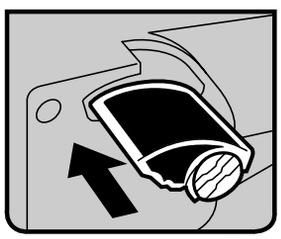


TCAX100E

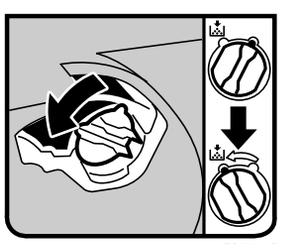
3 Pull out the toner container.


TCAX110E

4 Push in the new toner container until it fits in place.


TCAX130E

5 Turn the knob back to the position shown and close the front door.


TCAX140E

Clearing Misfeeds

⚠CAUTION

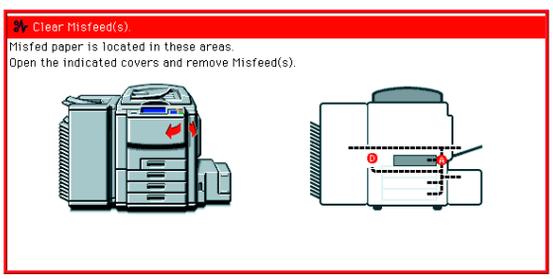
> ***• When removing misfed paper, do not touch the fusing section because it could be very hot.***

Note

- ❒ When clearing misfeeds, do not turn off the operation switch. If you do, your copy settings are cleared.
- ❒ To prevent misfeeds, do not leave any torn scraps of paper within the machine.
- ❒ If paper misfeeds occur repeatedly, contact your service representative.
- ❒ When clearing misfeeds, make sure that all units and levers are returned to their original position and all covers are closed.
- ❒ Do not touch originals in the document feeder when a paper misfeed occurs in the machine. If you do the machine cannot determine which originals have been copied and which haven't.

Check the Misfeed Location Display

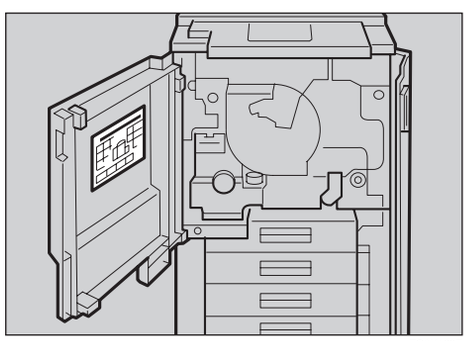
The display shows the location of misfed paper.



Clearing Paper Misfeeds

When A, B, C, D or Z is Displayed:

1. Open the front cover of the machine.
2. You can find the sticker (with ⚡ at the top) explaining how to remove misfed paper inside the front cover as shown in the illustration.



TCAX160E

3. Remove misfed paper following the instructions on the sticker.

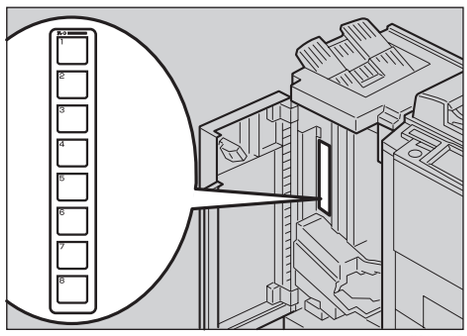
When R is Displayed:

Note

❒ This indicator is displayed only when your machine is equipped with the optional 20-bin sorter stapler.

1. Open the top cover of the sorter.

2. You can find the sticker (with at the top) explaining how to remove the misfed paper on the 20-bin sorter stapler as shown in the illustration.



TCAX170E

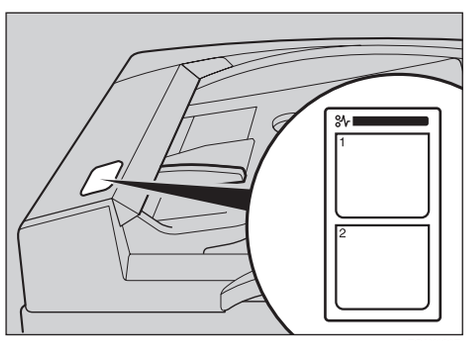
3. Remove the misfed paper following the instructions on the sticker.

When P is Displayed:

Note

❒ This indicator is displayed only when your machine is equipped with the document feeder.

1. You can find the sticker (with at the top) explaining how to remove the misfed paper on the document feeder as shown in the illustration.



TCAX180E

2. Remove the misfed paper following the instructions on the sticker.

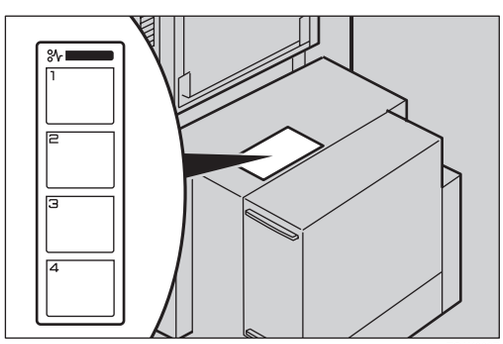
When U is Displayed:

Note

❒ This indicator is lit only when your machine is equipped with the optional large capacity tray.

1. You can find the sticker (with at the top) explaining how to remove the misfed paper on the large capacity tray as shown in the illustration.

2. Remove the misfed paper following the instructions on the sticker.



TCAX200E

Adding Staples

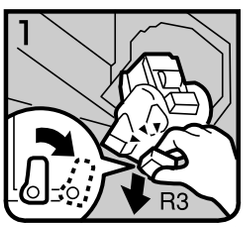
⚠CAUTION:

> ***• This machine has been tested for safety using this supplier's parts and consumables. We recommend you only use these specified supplies.***

Note

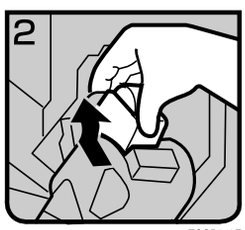
❒ If you use a staple cartridge other than that recommended, staple failure or staple jams might occur.

1 Open the sorter stapler front cover, then pull the R3 holder and pull out the stapler unit.



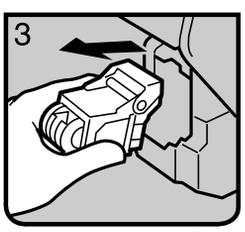
TCCP030E

2 Push the cartridge forward to release it.



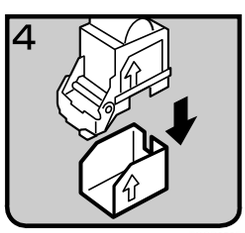
TCCP040E

3 Pull out the cartridge.



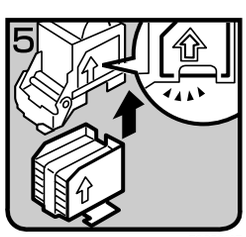
TCCP110E

4 Remove the empty refill in the arrow direction.



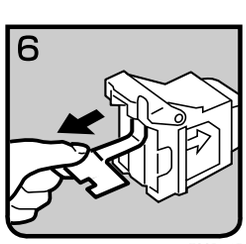
TCCP050E

5 Align the arrow mark on the new refill with that on the cartridge and push the new refill into the cartridge until a click is heard.



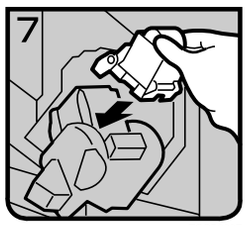
TCCP060E

6 Pull the ribbon out of the cartridge.



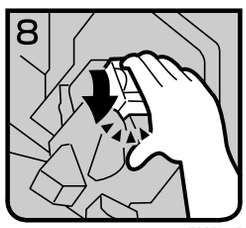
TCCP070E

7 Place the cartridge in the staple unit.



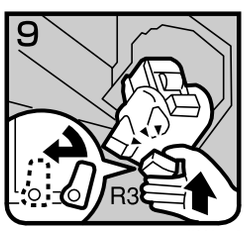
TCCP080E

8 Turn the cartridge backward until a click is heard.



TCCP090E

9 Return the R3 holder into the original position.



TCCP100E

10 Close the sorter stapler front cover.

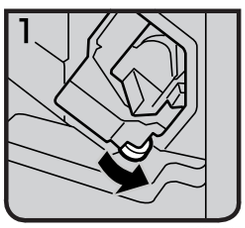
Removing Jammed Staples

Note

❒ Staples might be jammed because of curled copies. In this case, try turning the copy paper over in the tray. If there is no improvement, change to copy paper with less curl.

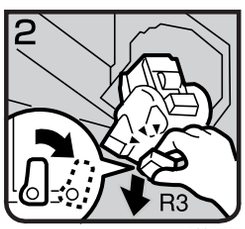
❒ After removing jammed staples, staples might not be ejected the first few times you try to use the stapler.

1 Open the sorter stapler front cover, then turn the dial in the arrow direction until the staple unit stops.



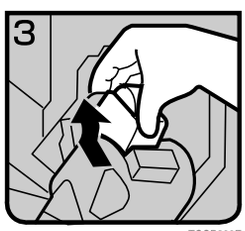
TCCP170E

2 Push the R3 holder and pull out the staple unit.



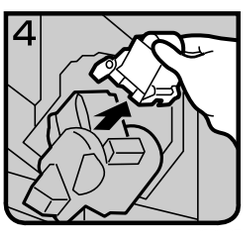
TCCP120E

3 Push the cartridge forward to release it.



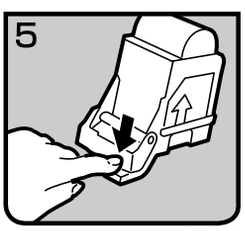
TCCP200E

4 Pull out the cartridge.



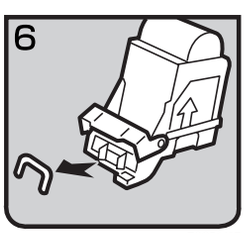
TCCP210E

5 Push the lock on the right side of the phase plate to open the phase plate.



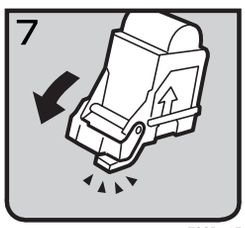
TCCP130E

6 Remove the jammed staple.



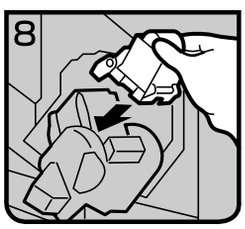
TCCP140E

7 Restore the phase plate in the original place until a click is heard.



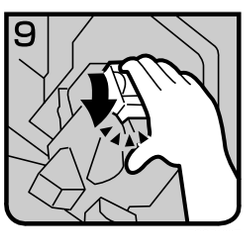
TCCP150E

8 Place the cartridge in the staple unit.



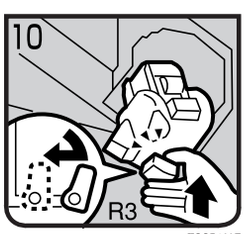
TCCP180E

9 Turn the cartridge backward until a click is heard.



TCCP190E

10 Return the R3 holder into the original position.



TCCP160E

11 Close the sorter stapler front cover.

Changing the Machine's Settings

Changing Paper Size

1st Tray Paper Size

Note

❒ Be sure to select the paper size with the user tools. Otherwise, misfeed might occur.

Reference

For paper sizes, weight , and the capacity that can be set in each tray, ☛ see page 238.

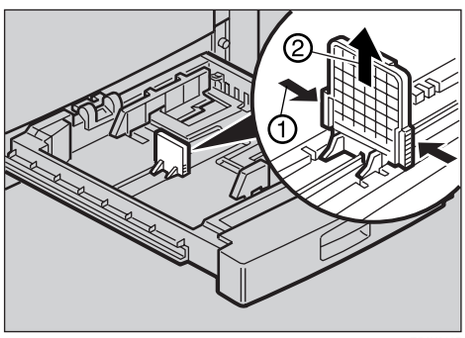
1 Make sure that the paper tray is not being used.

2 Pull out the paper tray until it stops.

Note

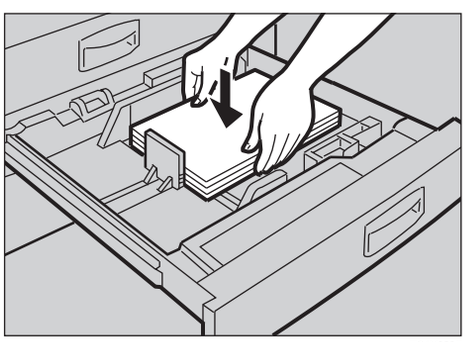
❒ Remove any remaining copy paper.

3 Adjust the back fence to the new paper size.



TCAY010E

4 Square the paper and set it in the tray.



TCAY020E

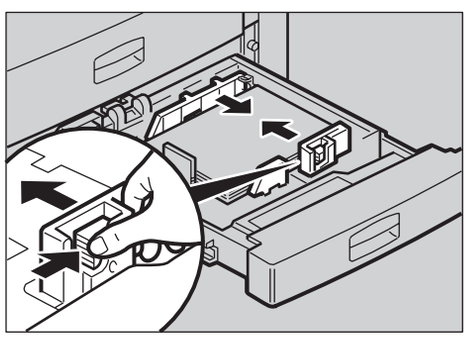
Note

❒ Shuffle the paper before setting it in the tray.

❒ Do not stack paper over the limit mark.

❒ Make sure the leading corners of the paper are under the corners.

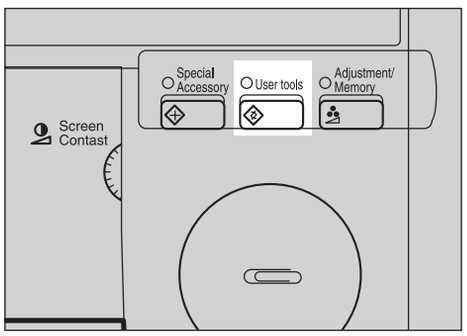
5 While pressing the release levers, slide the side fences to the new paper size.



TCAY030E

6 Push the paper tray in until it stops.

7 Press the **[User Tools]** key.



TCAS350E

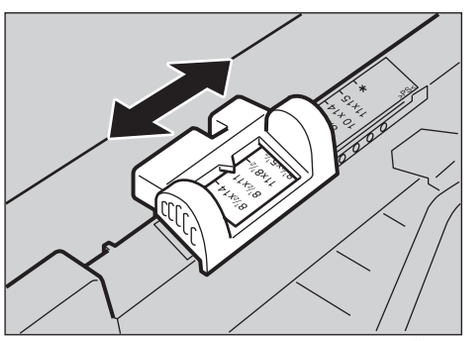
Reference

For details, ☛ see below.

2nd and 3rd Tray Paper Size

1 Follow the steps 1 to 5 on page 184.

2 Adjust the tray size with the paper size selector to the new paper size.


TCAY040N

Note

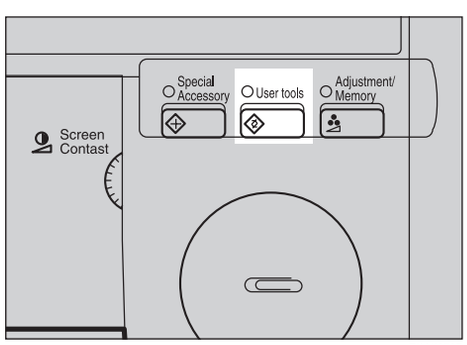
❒ If you cannot find desired paper size on the paper size selector, select the ✳, then press the **[User Tools]** key. ☛ see below.

3 Push the paper tray in until it stops.

Changing Paper Size with the User Tools

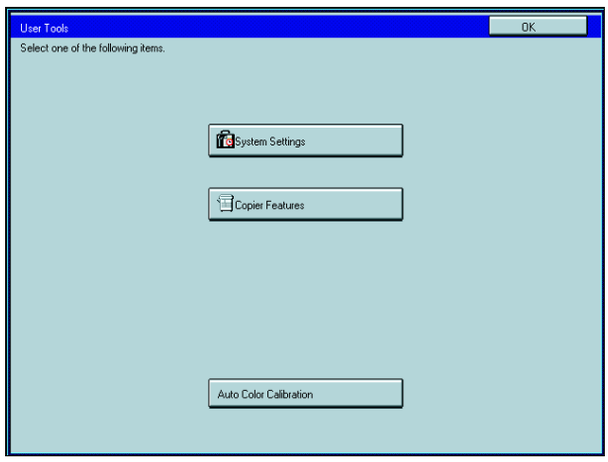
1 Follow the steps 1 to 6 on page 184.

2 Press the **[User Tools]** key.



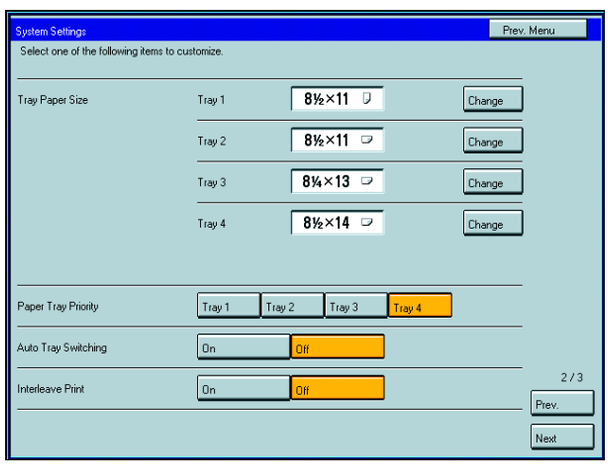
TCAS350E

3 Press the **[System Settings]** key.



4 Press the **[Next]** key until Tray Paper Size is displayed.

5 Press the **[Change]** key to select the tray.



6 Select the paper size, then press the **[OK]** key.

7 Press the **[User Tools]** key to exit from the user tools.

User Tools

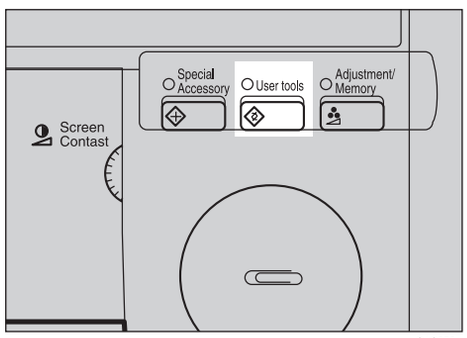
Accessing the User Tools

This section is for the key operators in change of this machine. You can change or set the machine's default settings.

Note

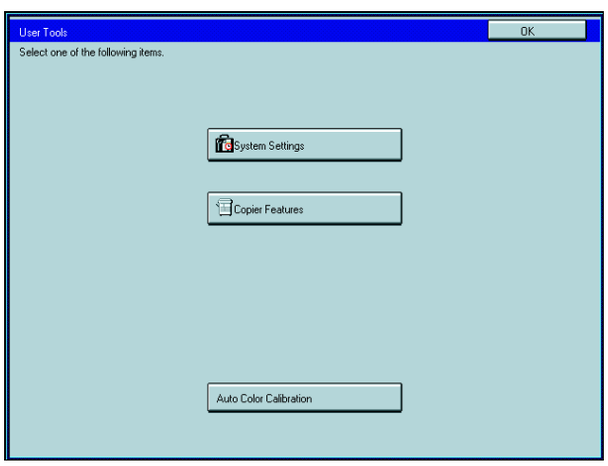
❒ After using the tools, be sure to exit from the user tools.

1 Press the **[User Tools]** key.

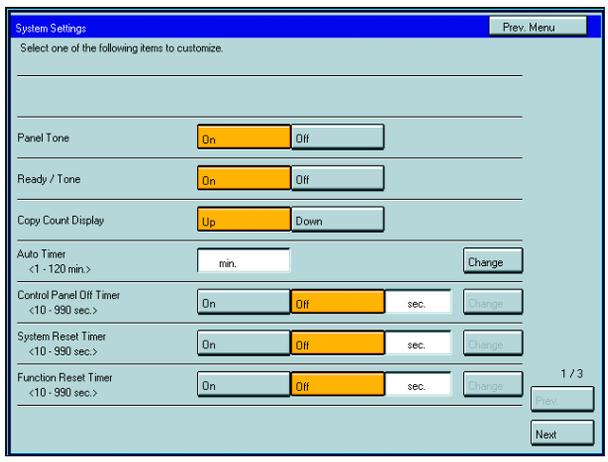


TCAS350E

2 Press the **[System Settings]** or **[Copier Features]** key.



3 Select the desired user tools menu.



Note

- **[Next] :** Press to go to the next page.
- **[Prev.] :** Press to go back to the previous page.

Reference

User tools menu, ☛ see page 189.

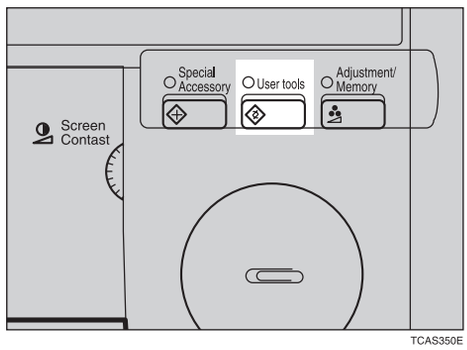
4 Change the settings by following the instructions on the panel display.

Note

- **[Prev. Menu] key:** Press to return to the previous menu.
- **[Cancel] key:** Press to return to the previous menu without changing any data.

Exiting from the User Tools

1 After changing the user tools settings, press the **[User Tools]** key.



Note

- The settings are not canceled even if the operation switch is turned off or the **[Clear Modes]** key is pressed.

User Tools Menu

System settings

Menu		See
Panel Tone	— — — — — — —	page 191
Ready/Tone		page 191
Copy Count Display		page 191
Auto Timer		page 191
Control Panel Off Timer		page 191
System Reset Timer		page 191
Function Reset Timer		page 191
Tray Paper Size		page 192
Paper Tray Priority		page 192
Auto Tray Switching		page 192
Interleave Print		page 192
3 Side Full Bleed		page 192
Bypass Tray Custom Size		page 193
Display Color Setting		page 193
Key Operator Tools		page 193
AOF (Keep It On)		page 193

Copier features

Menu			See
General Features	Auto Paper Select Priority		page 194
	ADS Priority (FC/Twin)		page 194
	ADS Priority (B&W/SC)		page 194
	Original Type Priority		page 194
	Color Priority		page 194
	Special Orig. Priority		page 194
	Photo Type (Auto Text/Photo)		page 194
	Photo Type (Photo)		page 194
	Copy Reset Timer		page 194
	Maximum Copy Quantity		page 195
	Tone : Original on Platen	— — — — — — —	page 195
	Front Side Margin Adjust.		page 195
	Back Side Margin Adjust.		page 195
	1→2 Duplex Auto Margin Adjust.		page 195
	Magnification Setting		page 195
	Initial Mode Setting		page 195
	Show Editor Grid		page 195
	Image Rotation		page 196
	Add Margin in Repeat Image		page 195
	Area Shape Priority		page 196
	Key Operator Tools	Accessible Modes Setting	page 196
		User Codes Setting	page 196
		Counter Manager	page 196
Image Adjustment	Background Dens. of A.D.S. (FC/Twin)		page 197
	A.C.S. Priority		page 197
	Color Sensitivity	— — — — — — —	page 197
	Process Black		page 197
	Inkjet Output Mode Setting		page 197
Duplex/ ADF/Sorter	Duplex Tray Auto Clear		page 197
	SADF Auto Reset Timer		page 197
	ADF Thin paper		page 198
	ADF Mixed Sizes	— — — — — — —	page 198
	ADF Auto Paper Select		page 198
	Full Color Copy Sorting		page 198
	Auto Sort Mode		page 198
Special Mode Program(s)	Special Mode	— — — — — — —	page 198

Auto Color Calibration

Copy Mode/Printer Mode	— — — — — — —	page 198

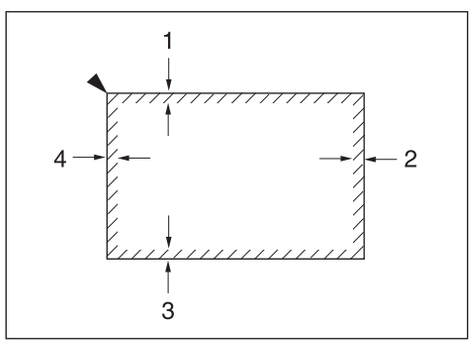
Setting You can Change with the User Tools (System Settings)

Reference

For how to access the user tools, ☛ see page 187.

System settings

Menu	Description
Panel Tone	The beeper (key tone) sounds when a key is pressed. This beeper can be turned on or off. **Note** ❒ Default: On
Ready/Tone	Choose whether the machine beeps when it becomes ready for a copy run after power up. **Note** ❒ Default: On ❒ When the “Panel Tone” is set to Off, the beeper does not sound even if the “Ready/Tone” is set to On.
Copy Count Display	The copy counter can be set to show the number of copies made (Up), or the number of copies remaining to be made (Down). **Note** ❒ Default: Up
Auto Timer	The machine turns itself off automatically to conserve energy after your job is finished, after the selected time. This function called “Auto Off”. The time can be set from 1 to 120 minutes. **Note** ❒ Default: 60 minutes
Control Panel Off Timer	The machine enters Energy Saver mode automatically after your job is finished, after the selected time. The time can be set from 10 to 990 seconds, or off. In Energy Saver mode, the panel display turns off. **Note** ❒ Default: On (60 seconds)
System Reset Timer	The machine returns to its prioritized mode automatically after your job is finished, after the selected time. This function is called “System Reset”. The time can be set from 10 to 990 seconds, or no system reset. **Note** ❒ Default: On (60 seconds) ❒ You can specify the prioritized mode with the “Function Priority” user tool. ☛ See above.
Function Reset Timer	When the “Interleave Print” is set to On, the machine turns the default mode (Copier or Printer) automatically after your job is finished, after the selected time. The time can be set from 10 to 990 seconds. **Note** ❒ Default: On (60 seconds) ❒ The optional printer is required to use this function.

Menu	Description
Tray Paper Size	Select the size of the copy paper set in the paper tray. **Note** ❒ If the specified paper size differs from the size of paper actually set in the paper tray, a paper misfeed might occur because the paper size is not detected correctly. **Reference** For details, ☞ see page 238.
Paper Tray Priority	You can select the paper tray which will be selected as a default in the following conditions: • When the main power switch or operation switch is turned on. • When System Reset or Auto Reset mode is turned on. • When the [**Clear Modes**] key is pressed. • When the Auto Paper Select mode is not selected. **Note** ❒ Default: Tray 1
Auto Tray Switching	If you load paper of the same size in two or more trays, the machine automatically shifts another tray when the tray in use runs out of paper. You can set or cancel this setting. **Note** ❒ Default: Off ❒ This function is not available in Area Editing Mode.
Interleave Print	By default, you can make the interrupt copies. You can cancel this setting. **Note** ❒ Default: On
3 Side Full Bleed	When this mode is off, narrow margins on all 4 sides of the original are not copied.  GCGENK2E **1: 2 ± 2mm, 0.08" ± 0.08"** **2: 2 ± 2mm, 0.08" ± 0.08"** **3: 2 ± 2mm, 0.08" ± 0.08"** **4: 4 ± 2mm, 0.16" ± 0.08"** When you turn it on, margins 1, 2 and 3 are copied. **Note** ❒ Default: Off ❒ You cannot cancel the leading edge margin (margin 4).

Menu	Description
Bypass Tray Custom Size	You can register the non-standard size paper when you make copies with the bypass tray. 1. Press the **[Change]** key. 2. Enter the horizontal size with the **[Number]** keys, then press the **[#]** key. 3. Enter the vertical size with the **[Number]** keys, then press the **[#]** key. **Note** ❒ Adjustment value: Metric version: Vertical: 100 - 330mm Horizontal: 140 - 483mm Inch version: Vertical: 3.9" - 13.0" Horizontal: 5.5" - 19.0"
Display Color Setting	You can change the color of the display editor. **Note** ❒ Default: Blue
Key Operator Tools If you select “On”, only operators who know the key operator code can access the “Key Operator Tools” in the System Settings and Copier Features. **Note** ❒ Default : Off ❒ If you select “On”, you should register the key operator code.	
AOF (Keep It On.)	**Note** ❒ For details about this function, contact your service representative.

Setting You can Change with the User Tools (Copier Features)

Reference

For how to access the user tools, see page 187.

General Features

Menu	Description
Auto Paper Select Priority	As a default setting, the Auto Paper Select is selected just after the machine is turned on or when modes are cleared. You can cancel this setting. **Note** ❒ Default: On
ADS Priority (FC/Twin)	As a default setting, the Manual Image Density is selected in Full Color mode just after the machine is turned on or when modes are cleared. You can cancel this setting so that the Auto Image Density is selected. **Note** ❒ Default: Manual
ADS Priority (B&W/SC)	As a default setting, the Auto Image Density is selected in Black & White, Single Color, and Twin Color mode just after the machine is turned on or when modes are cleared. You can cancel this setting. **Note** ❒ Default: Manual
Original Type Priority	You can select the original image type (Auto Original Type Select mode, Text/Photo mode, Text mode, Photo mode, or Special Original mode) that is selected automatically just after the machine is turned on or when modes are cleared. **Note** ❒ Default: Text/Photo mode
Color Priority	You can select the color mode (Auto Color Select mode, Full Color mode, or Black & White mode) that is selected automatically just after the machine is turned on or when modes are cleared. **Note** ❒ Default: Auto Color Select mode
Special Orig. Priority	You can select the special original type (Highlight Pen, Inkjet Output, or Map) that is selected automatically just after the machine is turned on or when modes are cleared. **Note** ❒ Default: Highlight Pen
Photo Type (Auto Text/ Photo)	You can select the photo type (Press Print, Glossy Photo, or 2nd Generation) in Auto Text/Photo mode that is selected automatically just after the machine is turned on or when modes are cleared. **Note** ❒ Default: Press Print
Photo Type (Photo)	You can select the photo type (Press Print, Glossy Photo, or 2nd Generation) in Photo mode that is selected automatically just after the machine is turned on or when modes are cleared. **Note** ❒ Default: Press Print
Copy Reset Timer	The machine returns to its initial condition automatically after your job is finished. The time can be set from 10 to 990 seconds, or no copy reset. 1. Select **[On]** or **[Off]** keys. 2. When you select **[On]**, enter the time with the **[Number]** keys. Then, press the **[#]** key. **Note** ❒ Default: On (60 seconds)

Menu	Description
Maximum Copy Quantity	The maximum copy quantity can be set from 1 to 999. **Note** ❒ Default: Off
Tone : Original on Platen	The beeper (key tone) sounds when you forgot to remove originals after copying. **Note** ❒ Default: Off ❒ When the “Panel Tone” is set to Off, the beeper does not sound even if the “Original Tone” is set to On.
Front Side Margin Adjust.	You can adjust the front side margin direction and width that is selected as a default in Front Side Margin Adjust. mode. **Note** ❒ Default: • Metric version: left/right 0mm • Inch version: left/right 0"
Back Side Margin Adjust.	You can adjust the back side margin direction and width that is selected as a default in Back Side Margin Adjust. **Note** ❒ Default: • Metric version: left/right 0mm • Inch version: left/right 0"
1→2 Duplex Auto Margin Adjust.	When you use 1 Sided → 2 Sided mode, the machine set the back side margin automatically. **Note** ❒ Default: Off
Magnification Setting	Up to 2 reproduction ratios which you frequently use can be registered. 1. Press the **[Setting]** key. 2. Select the **[User Ratio 1]** or **[User Ratio 2]** key. 3. Enter your desired ratio with the **[Number]** keys. Then press the **[OK]** key.
Initial Mode Setting	You can set the machine to recall program setting when the machine is turned on or when modes are cleared. **Note** ❒ Default: Normal
Show Editor Grid (Only for Edit type)	You can turn the grid snap on or off in the display editor. The grids may help you to mark a right angle shape. **Note** ❒ Default: Off
Image Rotation	When you use the same size and different direction copy paper, the machine rotates the original image 90°. **Note** ❒ Default: On
Add Margin in Repeat Image	You can select add margin or not. **Note** ❒ Default: On

Menu	Description
Area Shape Priority	When you designate areas, you can select the first designated shape. 1. Select the **(Rectangle)**, **(R.A.Polygon)**, **(Polygon)**, **(Closed Loop)**, or **(Multi. Closed Loop)** key. **Note** ❒ Default: **(Rectangle)** key
Key Operator Tools Use these tools to manage use of the machine. **Note** ❒ Enter a previously registered key operator code with the **[Number]** keys. **Reference** About the key operator code, ☛ see page 193.	
Accessible Modes Setting	You can assign user codes to each color mode. Operators must input their user codes before using each color mode (Full color, Black & White, Single, Twin Color). The machine keeps count of the number of copies made under each user code. 1. Select your desired color mode.
User Codes Setting	**Program** You can register the user codes. 1. Press the **[Program]** key. 2. Enter the user code with the **[Number]** keys. Then press the **[#]** key. 3. Select the color mode from **[Full Color]**, **[Black & White]**, **[Single]**, or **[Twin Color]** key. **Note** ❒ You can up to 200 user codes.
	Change You can change the user codes. 1. Press the **[Change]** key. 2. Select the user code. 3. Enter the user code with the **[Number]** keys. Then press the **[#]** key. 4. Select the color mode from **[Full Color]**, **[Black & White]**, **[Single]**, or **[Twin Color]** key.
	Clear You can clear the user codes. 1. Press the **[Clear]** key. 2. Select the user code that you want to clear. 3. If you want to clear the all user codes of the page, press the **[Select All]** key. **Note** If you want to change the **[Select All]**, press the **[Clr All Select]** key. 4. Press the **[OK]** key. 5. Press the **[Yes]** key.
	Delete All You can delete the all registered user codes. 1. Press the **[Delete All]** key. 2. Press the **[Yes]** key.
Counter Manager	**Counter List Print** You can print data for all user codes. 1. Press the **[Counter List Print]** key. 2. Press the **[Print Start]** key.
	Reset Counters You can check the number of copies made using each user code. Also, you can clear each code's counter. 1. Press the **[Reset Counters]** key. 2. Input the user code you want to check its number of copies with the **[Number]** keys. 3. Press the **[OK]** key. 4. Press the **[Yes]** key.

Menu	Description
Counter Manager	**Delete All** You can reset the counter for all user codes. 1. Press the **[Delete All]** key. 2. Press the **[Yes]** key.

Image Adjustment

Menu	Description
Background Dens. of A.D.S. (FC/Twin)	The Auto Image Density levels in Full Color mode can be made lighter or darker (5 levels). **Note** ❒ Default: level 3
A.C.S. Priority	You can select color images or black & white images that are priority detected in Auto Color Select mode. **Note** ❒ Default: Full Color
Color Sensitivity	When in Color Erase or Color Conversion mode, the function can be made more or less sensitive to the color to be erased or converted. It can be adjusted within 5 levels (“Narrow” to “Wide”). For example, if red is selected as the color to be erased or converted, “Narrow” will result in only red being erased or converted, and “Wide” will result in other colors close to red being erased or converted. **Note** ❒ Default: level 3
Process Black	When copying in full color, 4 colors (Yellow, Magenta, Cyan, and Black) are used by default. You can change this so that only 3 colors (Yellow, Magenta, and Cyan) are used. **Note** ❒ Default: 4 colors
Inkjet Output Mode Setting	You can select the type of image adjustment for the Inkjet Output Mode from the below. If you want to emphasis yellow, select 1. If you want to emphasis red and yellow, select 2. If you want to emphasis red and blue, select 3. **Note** ❒ Default: 1

Duplex/ADF/Sorter

Menu	Description
Duplex Tray Auto Clear	When making two-sided copies from one-sided originals, if the last original is an odd page, the last copy will be automatically delivered with the reverse side blank. You can cancel this setting. **Note** ❒ Default: On
SADF Auto Reset Timer	When you set one original at a time in the document feeder, the **Auto Feed** indicator lights for a selected time after an original is fed to show that the document feeder is ready for another original. The time can be set from 1 second to 99 seconds. **Note** ❒ Default: 5 seconds

Menu	Description
ADF Thin paper	Use when changing the type of originals to be fed. Select this function to avoid damaging thin originals (40 - 52g/m^2, 11-14 lb) set in the document feeder. **Note** ❒ Default: Off
ADF Mixed Sizes	By default, you cannot set originals of different sizes at one time in the document feeder. You can cancel this setting. **Note** ❒ Default: Off ❒ If you select **[On]**, the copying speed will be reduced. ❒ When setting different length originals, all originals must be flush with the back fence of the document feeder. ❒ Smaller size originals might be skewed a little.
ADF Auto Paper Select	By default, the Auto Paper Select is selected when you set originals in the document feeder. You can cancel this setting. **Note** ❒ Default: On
Full Color Copy Sorting	You can disable sorting, stacking, or stapling in Full Color mode to maximize quality of full color copies. **Note** ❒ Default: Off
Auto Sort Mode	You can have the machine select Sort mode automatically when you insert two or more originals in the document feeder and make two or more copies from each original. **Note** ❒ Default: On

Special Mode Program(s)

Special Mode	Use to recall the special modes set by your service representative.

Auto Color Calibration

Copy Mode/Printer Mode	When the tone of a specific color is strong or the color tone of copies is different from that of originals, perform this function. This function adjusts the balance of the 4 basic colors. 1. Press the **[Auto Color Calibration]** key. 2. If your machine has the printer option installed, select Copy Mode or Printer Mode. Then press the **[On]** key. 3. Press the **[Print Start]** key. **Note** ❒ The test pattern is delivered to the copy tray. 4. Set the test pattern on the exposure glass (platen glass). Then press the **[Scan Start]** key. **Limitation** ❒ You cannot set the test pattern in the document feeder. **Note** ❒ To return to the previous setting, press the **[Prev. Setting]** key.

Maintaining Your Machine
Where to Put Your Machine
Do’s and Don’ts
Remarks
Use and Storage of Supplies

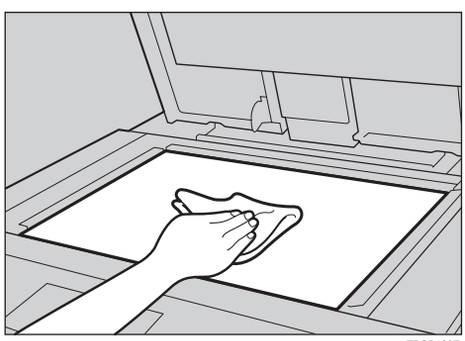
Maintaining Your Machine

If the exposure glass (platen glass), platen cover or document feeder belt is dirty, you might not be able to make copies as you want. Clean them if you find them dirty.

Note

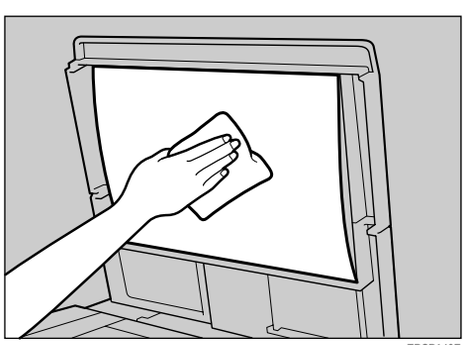
- ❒ Do not use chemical cleaner or organic solvent, such as thinner or benzene. If they get into the machine or melt plastic parts, a failure might occur.
- ❒ Do not clean parts other than those specified in this manual. Such parts should be cleaned by your service representative.
- ❒ Wipe the machine with a soft, damp cloth. Then wipe it with a dry cloth to remove the water.

Exposure Glass (Platen Glass)



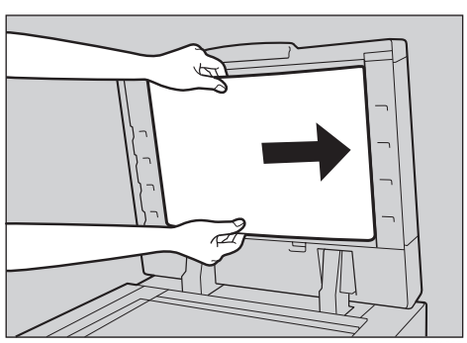
TRSR130E

Platen Cover



TRSR140E

Document Feeder



TRSR150E

Where to Put Your Machine

Machine Environment

Your machine's location should be carefully chosen because environmental conditions greatly affect its performance.

Optimum environmental conditions

⚠ ***CAUTION:***

- *Keep the machine away from humidity and dust. A fire or an electric shock might occur.*
- *Do not place the machine on an unstable or tilted surface. If it topples over, it cause injury.*

⚠ ***CAUTION:***

- *If you use the machine in a confined space, make sure there is a continuous air turnover.*

❒ Temperature: 10 – 32°C, (50 – 89.6°F)(humidity to be 54% at 32°C, 86°F)

❒ Humidity: 15 – 80% (temperature to be 27°C, 80.6°F at 89.6%)

❒ A strong and level base.

❒ The machine must be level within 5mm, 0.2" both front to rear and left to right.

❒ To avoid possible built-up ozone, make sure to locate this machine in a large well ventilated room that has an air turnover of more than 30m³/hr/person.

Environments to avoid

❒ Locations exposed to direct sunlight or strong light (more than 2,000 lux).

❒ Locations directly exposed to cool air from an air conditioner or heated air from a heater. (Sudden temperature changes might cause condensation within the machine.)

❒ Places where the machine might be subjected to frequent strong vibration.

❒ Dusty areas.

❒ Areas with corrosive gases.

Power Connection

⚠ ***WARNING:***

- ***Only connect the machine to the power source described on the inside front cover of this manual.***

⚠ ***WARNING:***

- ***Avoid multi-wiring.***
- ***Do not damage, break or make any modifications to the power cord. Do not place heavy objects on it, pull it hard or bend it more than necessary. These actions could cause an electric shock or fire.***
- ***Do not plug or unplug the power cord with your hands wet. Otherwise, an electric shock might occur.***

⚠ ***WARNING:***

- ***Make sure the wall outlet is near the machine and freely accessible so that in event of an emergency it can be unplugged easily.***

⚠ ***CAUTION:***

- *When you move the machine, unplug the power cord from the wall outlet to avoid fire or electric shock.*
- *When the machine will not be used for a long time, unplug the power cord.*

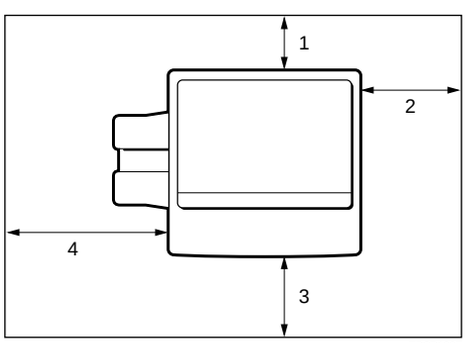
⚠ ***CAUTION:***

- *When you pull out the plug from the socket, grip the plug to avoid damaging the cord and causing fire or electric shock.*

- When the main power switch is in the Stand-by positions, the optional anti-condensation heaters are on. In case of emergency, unplug the machine's power cord.
- When you unplug the power cord, the anti-condensation heaters turn off.
- Make sure the plug is firmly inserted in the outlet.
- Voltage must not fluctuate more than 10%.

Access to Machine

Place the machine near the power source, providing clearance as shown.



1. Rear: more than 10cm, 4.0"
2. Right: more than 45cm, 17.8"
3. Front: more than 55cm, 21.7"
4. Left: more than 48cm, 18.9"

Note

❒ For the required space when options are installed, please contact your service representative.

Do’s and Don’ts

⚠ ***CAUTION:***



• When you move the machine, unplug the power cord from the wall outlet to avoid fire or electric shock.

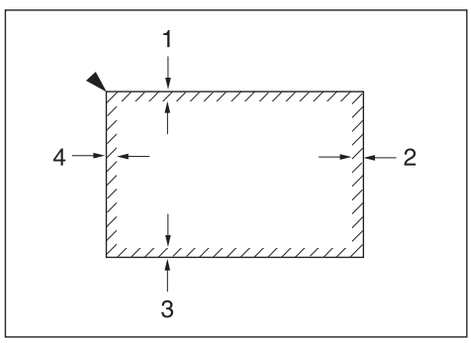
• When the machine will not be used for a long time, unplug the power cord.

- Do not touch areas on or around the fusing unit. These areas get hot.
- After making copies continuously, you might feel the exposure glass is heated. But this is not a malfunction.
- You might feel warm around the ventilation hole. This is caused by exhaust air, and not a malfunction.
- Do not turn off the operation switch while copying. When turning off the operation switch, make sure that copying is completed.
- The machine might fail to produce good copy images if there should occur condensation inside caused by temperature change.
- Do not open the covers of machine while copying. If you do, misfeeds might occur.
- Do not move the machine while copying.
- If you operate the machine improperly or a failure occurs on the machine, your machine settings might be lost. Be sure to take a note of your machine settings.
- Supplier shall not be liable for any loss or damages resulting from a failure on the machine, loss of machine settings, and use of the machine.

Remarks

Copier

- ❒ Be careful not to move the original during the scanning process.
- ❒ To avoid problems caused by curled copies, try turning over the paper stack in the paper tray. If there is no improvement, change to copy paper with less curl.
- ❒ Load paper with the copy side down in the paper trays. If copies are curled, try turning the copy paper over in the tray. If there is no improvement, change to copy paper with less curl.
- ❒ As a default setting, narrow margins on all four sides will not be copied as shown in the illustration.



GCGENK2E

1: 2 ± 2mm, 0.08"± 0.08"
2: 2 ± 2mm, 0.08"± 0.08"
3: 2 ± 2mm, 0.08"± 0.08"
4: 4 ± 2mm, 0.16"± 0.08"

Use and Storage of Supplies

Copy Paper

❒ Copy paper of the types or in the conditions listed below are not recommended for this copier.

- Folded, curled, creased, or damaged paper
- Torn paper
- Perforated paper
- Paper with conductive or low electrical resistance coating such as carbon or silver coating
- Thermal paper, art paper
- Thin paper that has low stiffness
- Damp paper
- Wavy paper
- Stapled paper

❒ Never use ink-jet printer paper to prevent failure.

❒ Use a proper type OHP transparency and set it in correct direction to prevent failure.

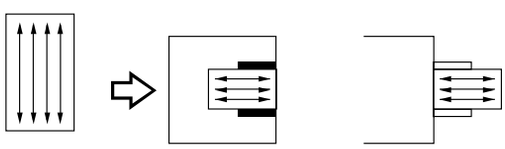
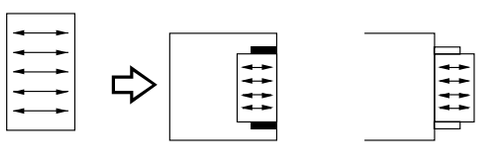
❒ Fan copy paper and OHP transparencies to get air between the sheets before loading.

❒ Do not touch copy paper if your fingers are wet or oily; finger prints may appear on the copy.

❒ Load paper with the copy side down in the paper trays. If copies are curled, try turning the copy paper over in the tray. If there is no improvement, change to copy paper with less curl.

❒ When copying on rough surface paper, the copy image may be light.

❒ When setting paper thinner than 64g/m^2, 17 lb or translucent paper in the paper trays or bypass trays, set it as shown in the figure below. The paper is divided into the vertical and horizontal types depending on the texture flow direction. If you set thin paper or translucent paper in the reverse direction, a paper jam might occur. Since A3, B4, 11" × 17", and 8$_{1/2}$" × 14" sizes of thin paper are set in the lengthwise direction in this machine, they must be of the vertical type.

	Texture flow	Setting paper in the paper trays	Setting paper in the bypass tray
Vertical type			
Horizontal type			

GCYOSI1E

GCYOSI2E

Paper Storage

Paper should always be stored properly. Improperly stored paper might result in poor image reproduction, creased copies, and paper misfeeds. Generally, avoid curling and absorption of moisture.

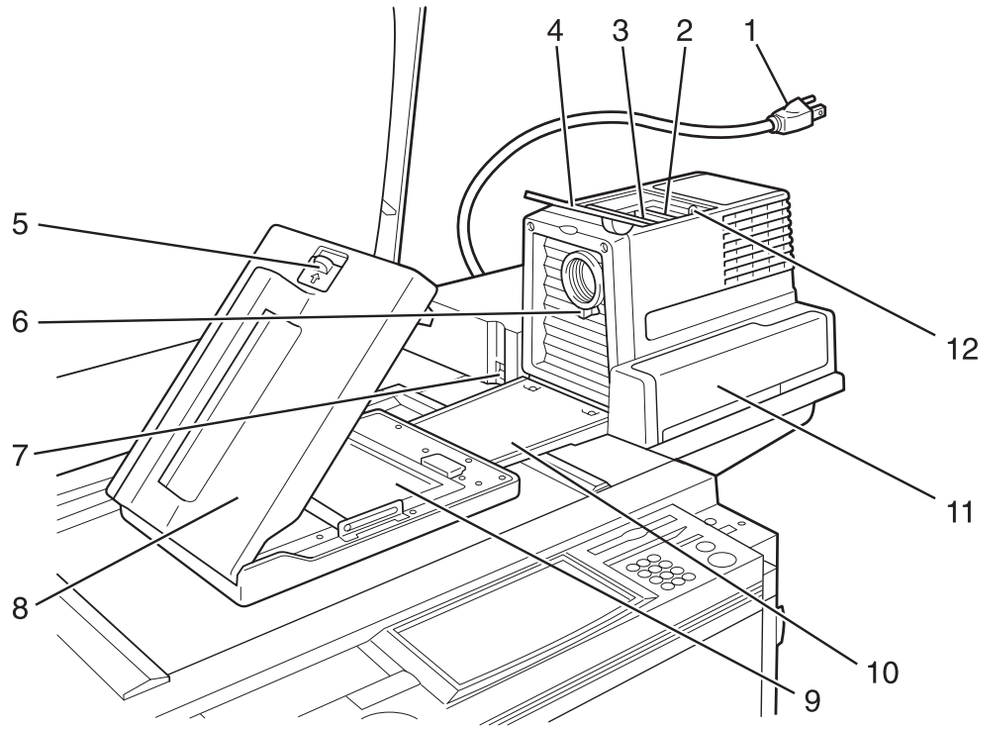
- ❒ Avoid storing paper in humid areas. Under high temperature and high humidity, or low temperature and low humidity conditions, store paper in a vinyl bag.
- ❒ Do not store paper where it will be exposed to heat.
- ❒ Store on a flat surface.
- ❒ Use older stock first.
- ❒ Do not lay heavy objects on paper.
- ❒ Keep open reams of paper in the package, and store as you would unopened paper.

Toner Storage

- ❒ Store in a cool, dark place.
- ❒ Never store toner where it will be exposed to heat.
- ❒ Do not lay heavy objects on toner container.

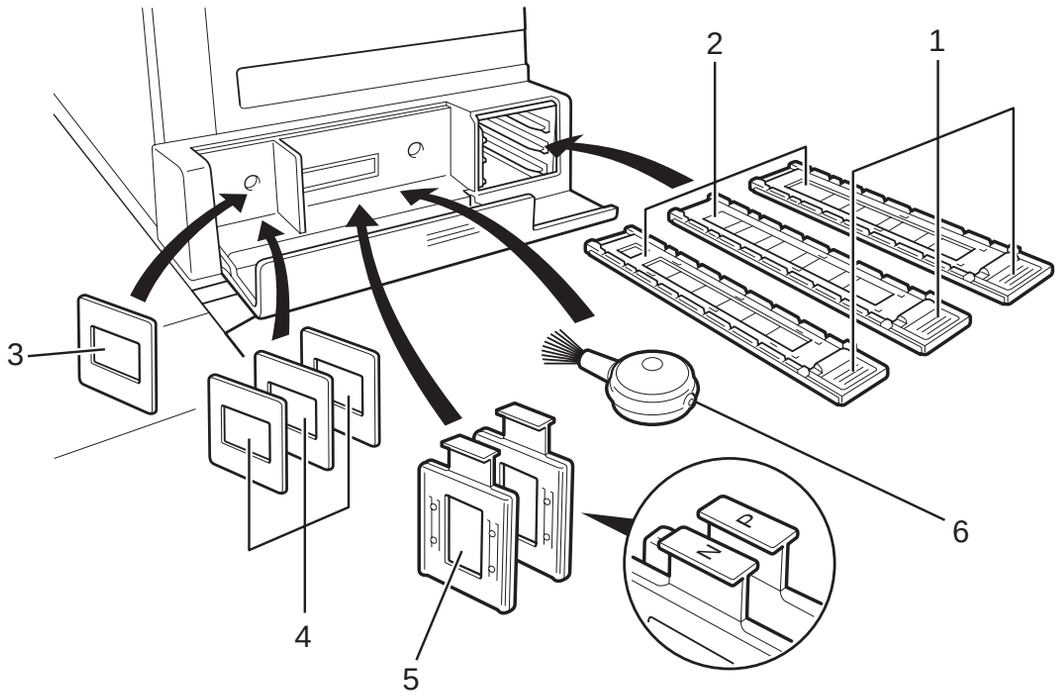
Projector Unit Operation

Guide to Components



TCAROA0E

1. **Power cord**
   Plug the power cord into a wall outlet.
2. **Holder slot**
   Set the holder here.
3. **Filter slot**
   Insert the P or N filter here.
4. **Film cover**
   To protect the slots from dust, close it when you are not using the projector.
5. **Mirror unit release lever**
   Slide this to the left when opening the mirror unit.
6. **Focusing lever**
   Adjusting the focus with this lever when you make copies from a glass mount film.
7. **Power switch**
   Switches the power on or off.
8. **Mirror unit**
   Reflects the light from the projector to the copier.
9. **Fresnel lens**
   Pull this up when setting film on the exposure glass.
10. **Lens cover**
    To protect the lens from dust, close it when you are not using the projector.
11. **Accessory box**
    Accessories should be stored here.
12. **Holder lever**
    Use to set the holder into the holder slot.



TRSR0B0E

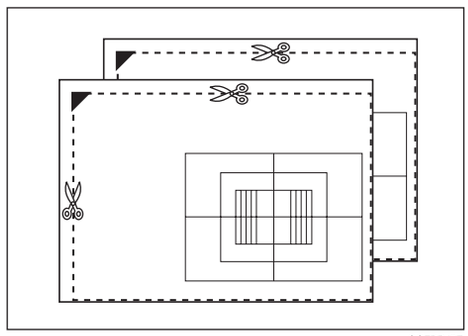
1. **Lock levers**
   Use to fix the film after setting it in the holder.
2. **Film holders**
   Set 35mm film in one of these holders.
   - Slide holder: Set mounted positive films in this holder. (This holder is covered with glass.)
   - Film strip holder: Set negative or positive strip film and base film here.
   - Glass mount film holder: Set the positive glass mount films in this holder. (This holder is covered with glass.)
3. **Slide mount**
   Use to make a base film slide.
4. **Base film slides**
   Use them when performing shading with Negative film.
5. **Filters (P = Positive, N = Negative)**
   One of them should be set in the filter slot.
6. **Blower brush**
   Use to clean the lens or glass.

Master film position sheet

Make a copy of the master sheet onto type C film and use the copy to position the film correctly on the exposure glass.

Make a copy from the original sheet, cut around the surrounding margin on the dotted lines, and cut away the center part corresponding to the size of the film to be copied.

Keep the master film position sheet.



GCFPRJ2E

Before Operating the Projector

Available Films and Setting

Setting location / Film type / size	Slide film holder	Slide strip holder	Glass mount film Holder	Exposure glass (platen glass)
35mm mount film	○	×	×	×
35mm glass mount film	×	×	○	×
35mm strip film	×	○	×	○
60 × 45mm	×	×	×	○
60 × 60mm	×	×	×	○
60 × 70mm	×	×	×	○
60 × 80mm	×	×	×	○
60 × 90mm	×	×	×	○
4" × 5" (101.6 × 127mm)	×	×	×	○
Maximum size (142 × 210mm, 5.5" × 8.2")	×	×	×	○

Note

❒ Do not use the same film for more than 30 minutes.

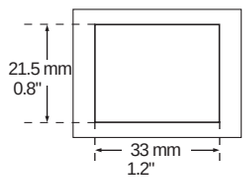
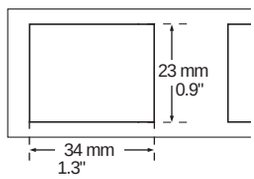
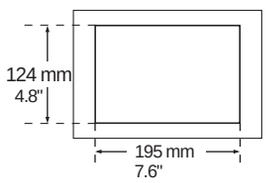
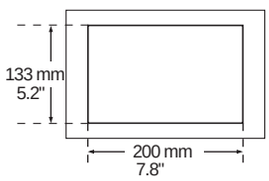
❒ Do not store film in rooms where the temperature is more than 30°C, 86°F.

❒ For valuable images, we recommend copying from duplicates.

❒ When using a film strip, be sure to take it out from the film protection sheet.

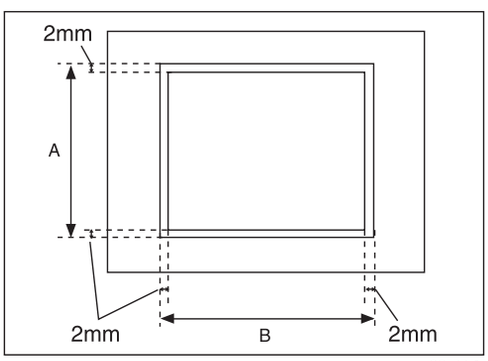
About Copying

When setting mount films and strip films in the film holders

	Mount films (using the slide holder)	Strip films (using the film strip holder)
Area of film that can be copied	 GCFPRE1E	 GCFPRE2E
Copy size (copying full size)	 GCFPRE3E	 GCFPRE4E

When setting wide films with the film position sheets

Narrow margins on all four sides will not be copied as shown in the illustration.



GCFPRJ3E

Film size	A	B
60 × 45mm	61.3mm	48mm
60 × 60mm	61.3mm	64mm
60 × 70mm	61.3mm	77mm
60 × 80mm	61.3mm	84mm
60 × 90mm	61.3mm	93mm
4" × 5"	100mm	125mm
Maximum	142mm	210mm

Notes for Operation

- ❒ First, you must perform shading to get the projector to register the condition of the film. This way, the projector can adjust the light intensity automatically while copying.
- ❒ If you press the **[Clear Modes]** key or **[Cancel]** key while using Projector function, all operations with the Projector will be canceled.
- ❒ You can adjust the color tone and color density manually.
- ❒ This projector has an automatic focus function, but if you use the glass mount film holder, adjust the focus manually.
- ❒ Do not forget to turn off the power switch of the projector when you are not using it.
- ❒ Do not obstruct the light path from the projector. If the light path is obstructed, the image might not match the original.
- ❒ This shading adjustment is very sensitive, so after the shading operation the mirror unit must be left perfectly still. Do not move it or allow vibrations to interfere with it. If this happens during copying, lines might appear on the copy. In that case, you must perform shading again.
- ❒ If you need to open and close the doors (to clear a jam or add toner), we recommend that you perform shading again afterwards.
- ❒ Avoid multi-wiring.

How to Copy from Film

The outline procedure for making copies is given below. Refer to the rest of this section for details of each step.

❶ Position the projector. ☛ See page 215.



❷ Prepare the film. ☛ See page 216.



❸ Select the film type and perform shading. ☛ See page 220.



❹ Adjust color, density and focus. ☛ See page 228.



❺ Select modes. ☛ See page 231.



❻ Press the **[Start]** key.



❼ Choose next job. ☛ See page 232.

Positioning the Projector

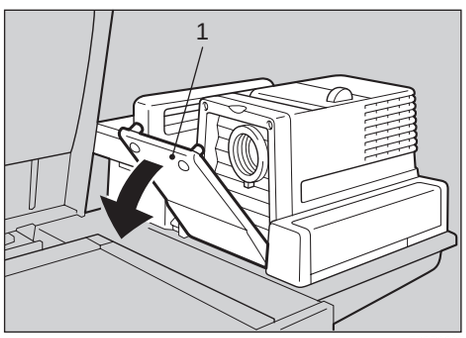
Note

❒ Do not touch the fresnel lens or the glass on the mirror unit. Fingerprints or dirty parts might appear on the copy. If the fresnel lens becomes dirty, wipe it. ☛ See page 236.

1 Plug the projector into the wall outlet.

2 Turn on the main switch of the projector.

3 Lift the platen cover or the document feeder and lower the projector lens cover.



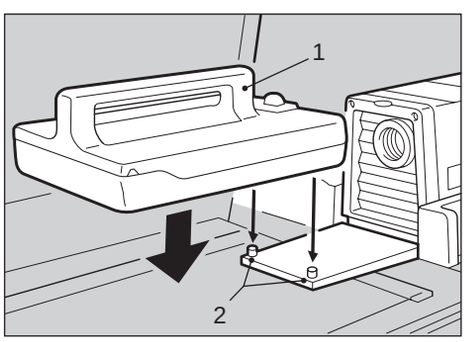
TRSR0C0E

1. Lens cover

4 Place the mirror unit so that the unit's position holes fit over the projector's positioning pins.

Note

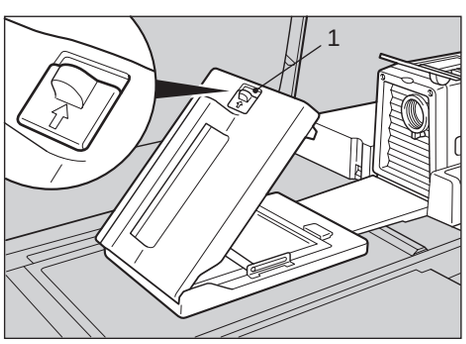
❒ Please be careful not to scratch the exposure glass when setting the mirror unit on it.



TRSR0D0E

1. Mirror unit
2. Positioning pins

5 Slide the mirror unit release lever in the direction of the arrow and open the mirror unit cover.



TRSR0E0E

1. Mirror unit release lever

Preparing the Film

Check this table to find out the key you should use for your film type.

Film Type			Filter	Base Film	Positioning Sheet	Holder	Key To Select
35mm	Positive	Slide (Mount)	**"P"** (Positive Filter)	×	×	Slide Holder	35mm Sides Positive
		Slide (Glass Mount)	**"P"** (Positive Filter)	×	×	Glass Mount Film Holder	35mm Sides Positive
		Strip Film	**"P"** (Positive Filter)	×	×	Film Strip Holder	35mm Sides Positive
	Negative	Strip Film	**"N"** (Negative Filter)	○	×	Film Strip Holder	35mm Strip Negative
Others Max. Size: 142 × 210mm 5.5" × 8.2"	Positive		**"P"** (Positive Filter)	×	○	× (Place on the exposure glass)	Positive Film on glass
	Negative		**"N"** (Negative Filter)	○	○	× (Place on the exposure glass)	Negative Film on glass

Note

❒ When performing shading, you must set a filter that matches that type of film you will copy.

❒ Use an "N" filter for Negative films and a "P" filter for Positive films.

Selecting the Base Film (If Needed)

Note

❒ When you use negative film for copying, use that film's appropriate base film for shading.

1 Confirm the manufacture, model name, and ASA rating of the film you want to use.

2 Select a base film suitable for the film to copy.

Note

❒ The following base film slides have been prepared as accessories.

- For FUJICOLOR (registered trademark of FUJI PHOTO COMPANY LIMITED.)
- For AGFA (registered trademark of AGFAGEVAERT AG.)
- For KODAK (registered trademark of EASTMAN KODAK COMPANY.)

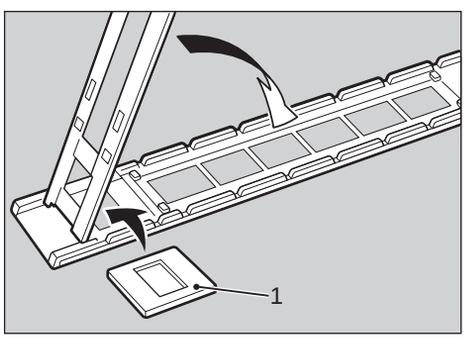
❒ If you use film that does not have suitable base film, you should make the base film yourself. ☛ See page 234.

3 Open the film strip holder and set the base film in the film strip holder.

Note

❒ The base film must be set sideways in the strip holder.

❒ There is no difference between both sides of the base film.



1: Base film

4 Close the holder and lock it as shown in the illustration.

Setting Films in the Holder (If Needed)

Check which type of holder you should use. ☛ See page 216.

Slide Holder/Glass Mount Film Holder

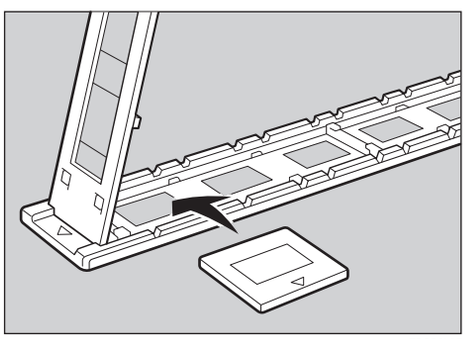
Note

❒ The slide holder is covered with glass. Set the mount films in the slide holder.

❒ The glass mount film holder is not covered with the glass. Set the glass mount films (covered by glass) in the glass mount film holder.

❒ Positive films are usually set in a slide mount or glass mount. If you use positive film not set in a mount, set it in the film strip holder. ☛ See below.

1 Open the cover of the slide holder or glass mount film holder, and set the slides in the holder one by one.



TRSR0L0E

Note

❒ Set the front side of the film face down when setting in the slide holder or glass mount film holder.

❒ When setting in the slide holder, make sure that all slides are aligned with the glass of the slide holder cover.

2 Close the holder and lock it.

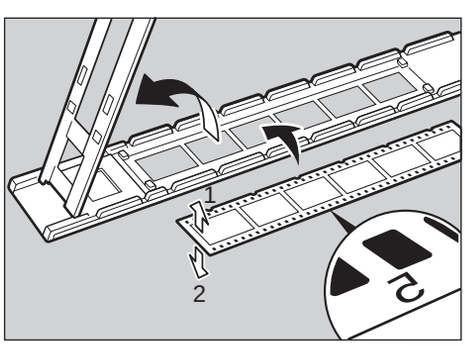
Film Strip Holder

Note

❒ Negative film usually come in stripes.

❒ Follow this procedure for positive strip film as well.

1 Open the film strip holder. Put the front side of the film face down and set it in the film strip holder.



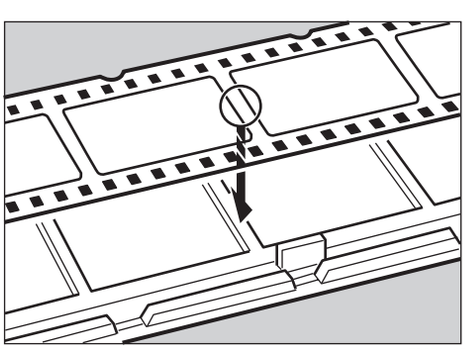
TRSR0K0E

1: Back
2: Front

Note

❒ When setting film, leave the base film in the film strip holder. This is convenient when performing shading again.

2 Adjust the position of the film.



TRSR0W0E

Note

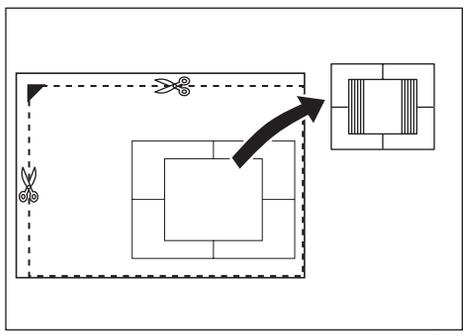
❒ Do not touch the image parts of the film when adjusting.

3 Close the film strip holder and lock it .

Cutting the Film Position Sheet (If Needed)

If you do not use the holders and position the film on the exposure glass, a positioning sheet is required.

Make a copy of one of the positioning sheet originals and use it to make your own sheet. Cut a hole the size of the film from the center of the copy, then crop the sheet by cutting around the dotted lines.

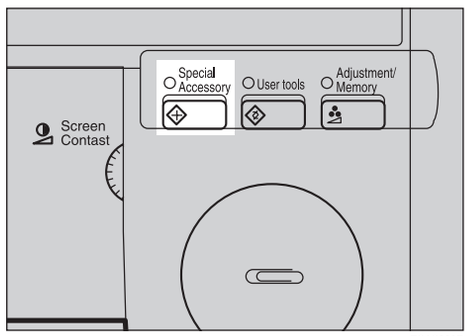


GCPSTN2E

Selecting the Film Type and Performing Shading

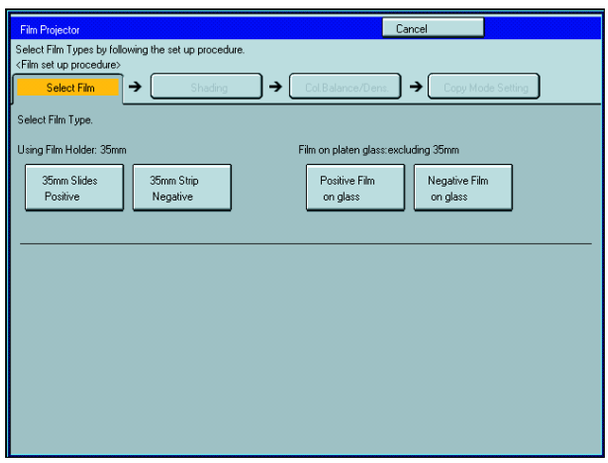
The procedures are different depending on the type of film.

1 Press the **[Special Accessory]** Key.



TCAS360E

2 Select the film type.



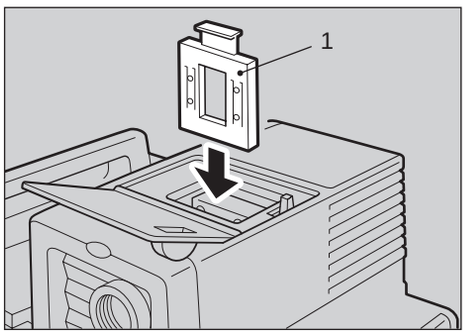
3 Follow the shading procedure appropriate to your film type — see below.

Film Type			Key To Select	Go to page…
35mm	Positive	Slide (Mount)	[35 mm Slides Positive]	Page 221
		Slide (Glass Mount)	[35 mm Slides Positive]	Page 221
		Strip Film	[35 mm Slides Positive]	Page 221
	Negative	Strip Film	[35 mm Strip Negative]	Page 223
Others Max. Size	Positive		[Positive Film on glass]	Page 222
	Negative		[Negative Film on glass]	Page 226

35mm Slides Positive

1 Press the **[Shading]** key.

2 Open the film cover and insert the **"P"** (Positive) filter firmly in the left slot as shown in the illustration.



TRSR0F0E

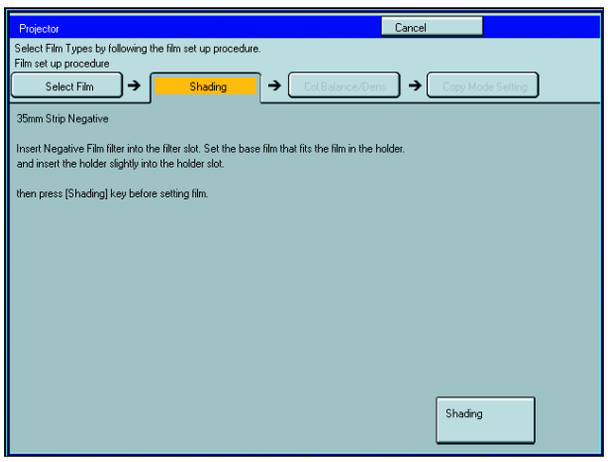
1: Filter

Note

- ❒ Be careful to insert the filter as shown, not the other way around.
- ❒ Before going to the next step, make sure that fresnel lens is lowered in position.

3 Press the **[Shading]** key.

❒ The machine will start shading automatically.

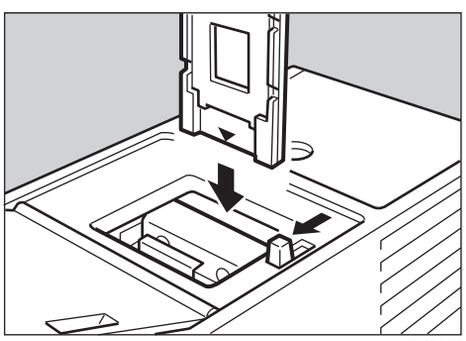


4 Set the film (slide or strip) in the holder.

Reference

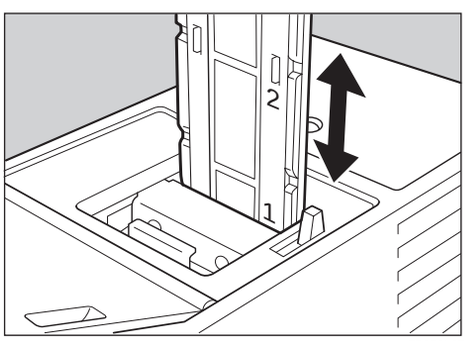
Regarding setting the film, ☛ see page 218.

5 While pressing the holder lever to the left, insert the holder in the right slot.



TRSR0Y0E

6 Adjust the holder by sliding it up and down to position the correct frame for copying.



TRSR0N0E

7 If needed, adjust the color, density, or focus.

Reference

For details, ☛ see page 228.

8 If needed, select the copier modes.

Reference

For details, ☛ see page 231.

9 Press the **[Start]** key.

10 Choose your next job.

Reference

For details, ☛ see page 232.

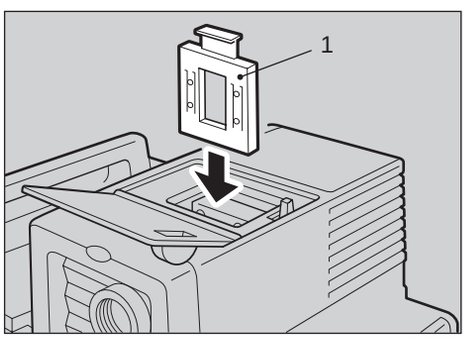
Positive Film on Glass

1 Press the **[Shading]** key.

2 Insert the **"P"** (Positive filter) in the left slot as shown in the illustration.

Note

❒ Be careful to insert the filter as shown, not the other way around.



TRSR0F0E

1: Filter

3 Cut the positioning sheet to match the film size.

Reference

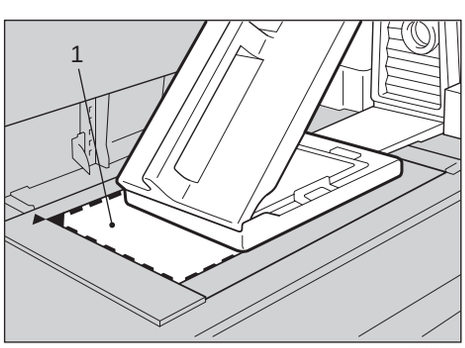
Regarding the positioning sheet, ☛ see page 219.

4 Place the positioning sheet under the mirror unit (on the exposure glass).

Note

❒ Place the marked corner of the film position sheet at the rear left corner of the exposure glass.

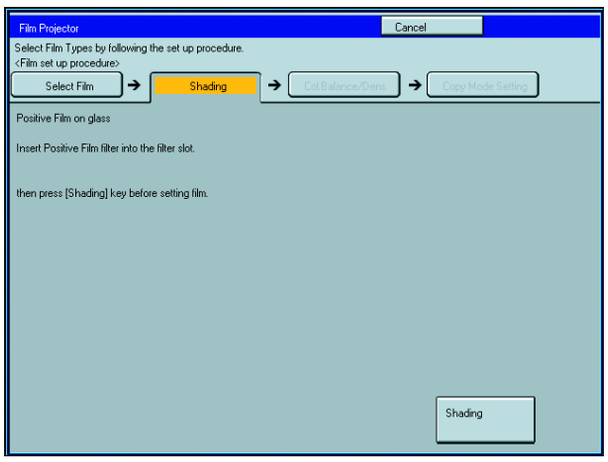
❒ Before going to the next step, make sure that the fresnel lens is lowered in position.



TRSR0G0E

1: Positioning sheet

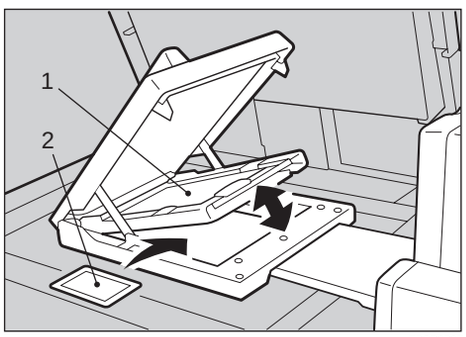
5 Press the **[Shading]** key.



Note

❒ The machine will start shading automatically.

6 Lift the fresnel lens, place the film inside the film position sheet, and lower the fresnel lens.



1. Fresnel lens
2. Film

Note

❒ Place the film face down.

❒ If the film is curled, the copy image might be out of focus. In this case, make the cutout film position sheet a little smaller than the film size and use it to hold the film down.

7 If needed, adjust the color, density, or focus.

Reference

For details, ☛ see page 228.

8 If needed, select the copier modes.

Reference

For details, ☛ see page 231.

9 Press the **[Start]** key.

10 Choose your next job.

Reference

For details, ☛ see page 232.

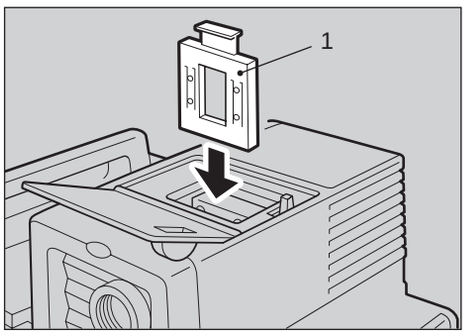
35mm Strip Negative

1 Press the **[Shading]** key.

2 Insert the **"N"** (Negative) filter in the left slot as shown in the illustration.

Note

- ❒ Be careful to insert the filter as shown, not the other way around.
- ❒ Before going to the next step, make sure that the fresnel lens is lowered in position.



TRSR0F0E

1: Filter

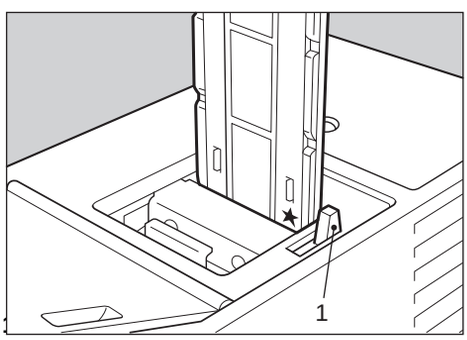
3 Set the base film in the holder.

Reference

Regarding setting the base film, ☛ see page 217.

4 Open the film cover and while pressing the holder lever to the left, insert film strip holder the right slot.

5 Insert the holder until the ★ mark is placed as shown in the illustration.

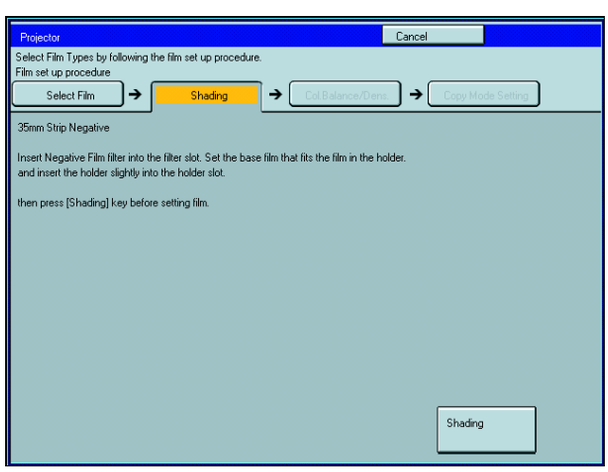


TRSR0J0E

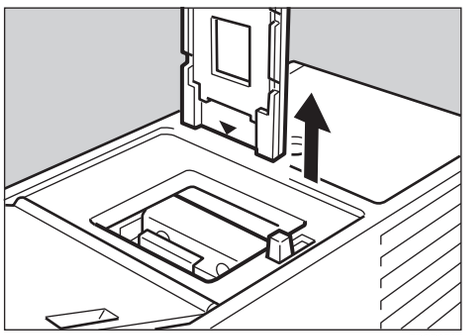
6 Press the **[Shading]** key.

Note

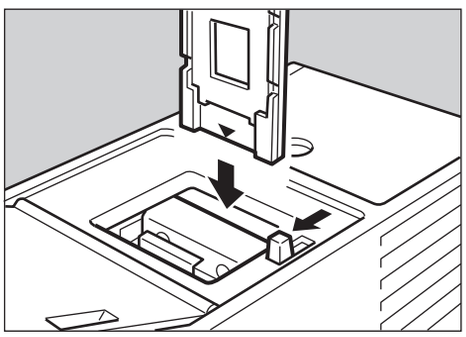
- ❒ The machine will start shading automatically.



7 Pull out the film strip holder with the base film.


TRSR0Z0E

8 Set the film in the holder.

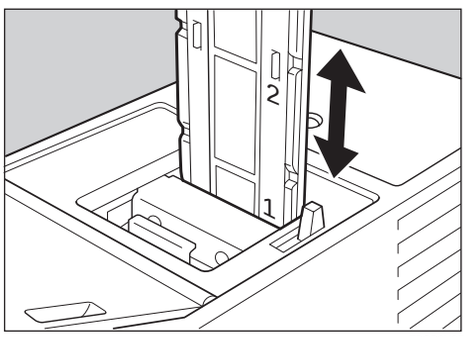

TRSR0Y0E

Reference

Regarding setting the film, ☛ see page 218.

9 While pressing the holder lever to the left, insert the holder in the right slot.

10 Adjust the holder by sliding it up and down to position the correct frame for copying.



TRSR0N0E

11 If needed, adjust the color, density, or focus.

Reference

For details, ☛ see page 228.

12 If needed, select the copier modes.

Reference

For details, ☛ see page 231.

13 Press the **[Start]** key.

14 Choose your next job.

Reference

For details, ☛ see page 232.

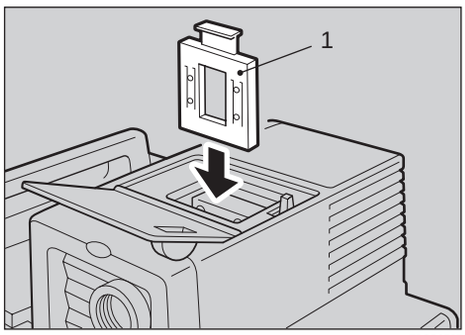
Negative Film on Glass

1 Press the **[Shading]** key.

2 Insert the **"N"** (Negative) filter in the left slot as shown in the illustration.

Note

❒ Be careful to insert the filter as shown, not the other way around.



TRSR0F0E

1: Filter

3 Cut the positioning sheet to match the film size.

Reference

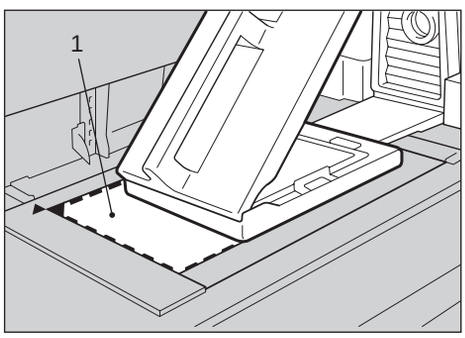
Regarding the positioning sheet, ☞ see page 219.

4 Place the positioning sheet under the mirror unit (on the exposure glass).

Note

❒ Place the marked corner of the film position sheet at the rear left corner of the exposure glass.

❒ Before going to the next step, make sure that the fresnel lens is lowered in position.



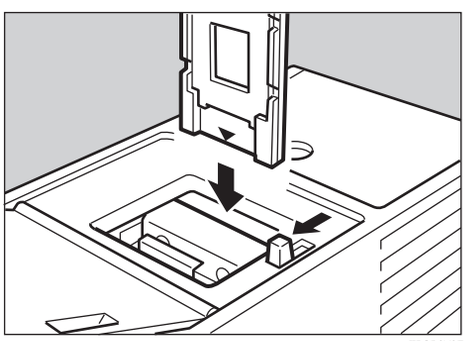
TRSR0G0E

1. Positioning sheet

5 Set the base film in the film strip holder.

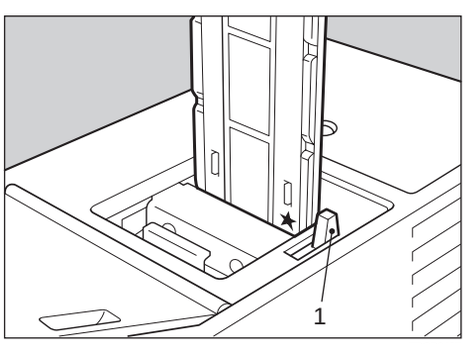
❒ Regarding setting the base film, ☞ see page 217.

6 Open the film cover and while pressing the holder lever to the left, insert the film strip holder in the right slot.



TRSR0Y0E

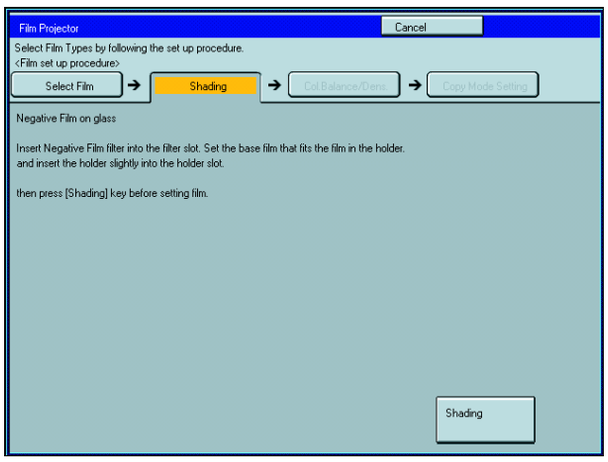
7 Insert the holder until the ★ mark is placed as shown in the illustration.



TRSR0J0E

1: Holder lever

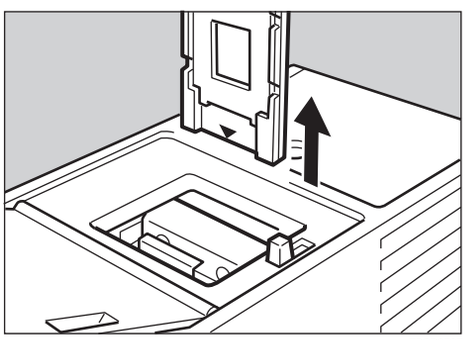
8 Press the **[Shading]** key.



Note

❒ The machine will start shading.

9 Pull out the film strip holder with the base film.

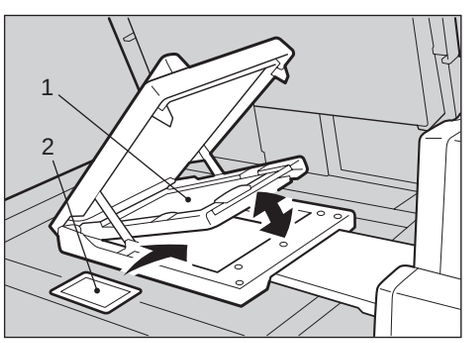


10 Lift the fresnel lens, place the film inside the positioning sheet, and lower the fresnel lens.

Note

❒ Place the film face down.

❒ If the film is curled, the copy image may be out of focus. In this case, make the cut out film position sheet a little smaller than the film size and use it to hold the film down.



1: Fresnel lens
2: Film

11 If needed, adjust the color, density, or focus.

Reference

For details, ☛ see page 228.

12 If needed, select the copier modes.

Reference

For details, ☛ see page 231.

13 Press the **[Start]** key.

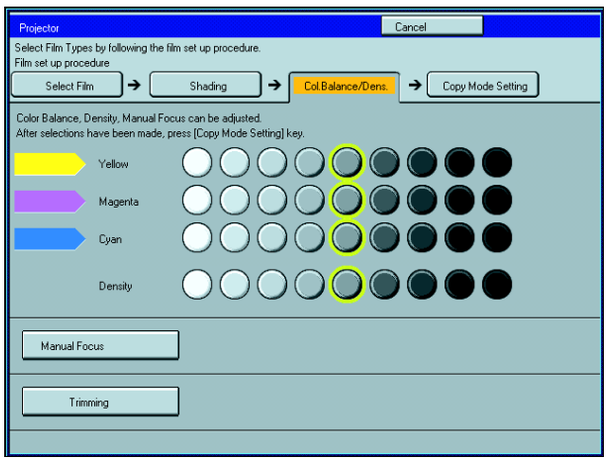
14 Choose your next job.

Reference

For details, ☛ see page 232.

Adjusting Color, Density and Focus

After shading, you can adjust the color tone, image density, or manual focusing.



Note

❒ When setting the glass mount film holder, manual focus adjustment is required.

❒ You can adjust the focus manually for 35mm film only.

Color Tones in Film Scanning

Use these modes when you want to adjust the overall color tone of copies. Also use these modes when you use negative film, because the color tone of copies varies with the film brand. You can adjust the tone of copies by adjusting Cyan, Magenta, and Yellow (three basic colors).

Notes on color tone adjustments

❒ If the color balance differs slightly from your image, you can also change the tones with the Color Adjustment (☛ See page 229) or Color Balance Adjustment (☛ See page 124) function.

❒ If dark parts are too black, change the U.C.R. Adjustment to level 3 (default = level 5). ☛ See page 132.

Density Adjustment

❒ Density can be set not only with this display, but also with Image Density Adjustment. However, when adjusting for the projector, we recommend you adjust the image density with this display.

Adjusting the Color Tone/Brightness Using Negative Film

❒ When you copy negative film, adjust the color tone (density of yellow, magenta, and cyan) and brightness (quantity of light) according to the table below. However, even when you use the same type of film, you must use different settings depending on the way the original picture is taken or developed. If you cannot make copies as you want, perform adjustment.

❒ You can also use the “Color Balance Adjustment” function of the copier to correct slight color difference.
☛ See page 124.

♦ The following table uses these values to indicate the color tone and brightness levels (the crosshatched values ( ) are the default settings):

Yellow (Y)	Lighter	← 1 2 3 4 5 6 7 8 9	→ Darker
Magenta (M)	Lighter	← 1 2 3 4 5 6 7 8 9	→ Darker
Cyan (C)	Lighter	← 1 2 3 4 5 6 7 8 9	→ Darker
Density	Lighter	← 1 2 3 4 5 6 7 8 9	→ Darker

Manufacturer		FUJI COLOR						Kodak					
Film type		SUPER G ACE *3			SUPER V *4	SUPER G *5	REALA ACE *6	GOLD *7			ROYAL GOLD *8		GOLD *9
ISO sensitivity		100	400	800	100	200	800	100	200	400	100	400	800
Color	Y	5	5	5	4	3	5	4	5	5	5	5	5
	M	5	5	5	5	5	6	7	7	6	7	5	6
	C	5	5	5	3	3	5	6	6	5	6	5	5
Density *1		6	4	5	6	5	4	5	4	5	5	5	5
Density *2		5	3	4	5	4	3	4	3	4	4	4	4

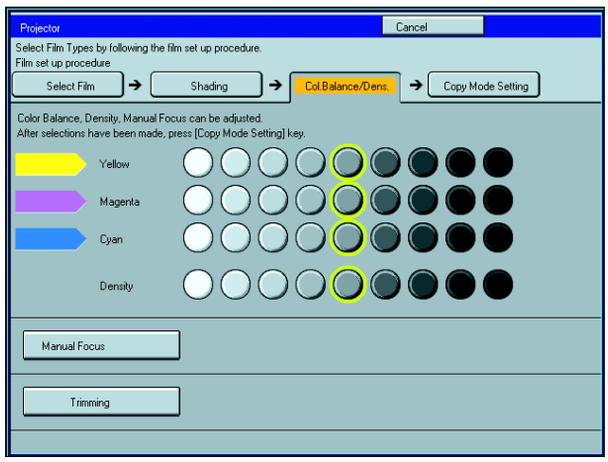
Manufacturer		Konica					AGFA		
Film type		LV *10		COLOR JX *11			COLOR HDC *12		
ISO sensitivity		100	200	100	200M	400	100	200	400
Color	Y	3	3	4	5	5	4	6	8
	M	6	5	7	4	5	5	6	5
	C	5	4	5	4	3	5	5	2
Density *1		5	5	6	5	5	5	4	5
Density *2		4	4	5	4	4	4	3	4

- Density *1 should be used when film is set in the film holder.
- Density *2 should be used when film is set on the exposure glass (platen glass).

*3, *4, *5, *6: These products are registered trademarks of Fuji Photo Film Co., Ltd.
*7, *8, *9: These products are registered trademarks of Kodak Ltd.
*10, *11: These products are registered trademarks of Konica Corporation.
*12: This product is a registered trademark of Agfa Gevaert AG.

1 If you want to adjust the color tone or image density, select **[Col. Balance/Dens.]** key.

2 Select the level (1 - 9).



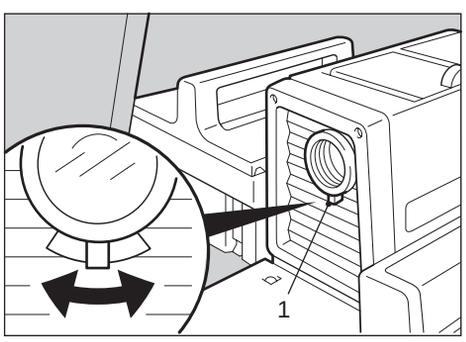
3 If your film type is 35mm and you want to adjust focus manually, press the **[Manual Focus]** key.

4 Place a blank piece of white paper under the mirror unit.

5 Adjust the focus with the focusing lever, then press the **[OK]** key.

Note

❒ After copying, return the focusing lever to the center.



TRSR0Q0E

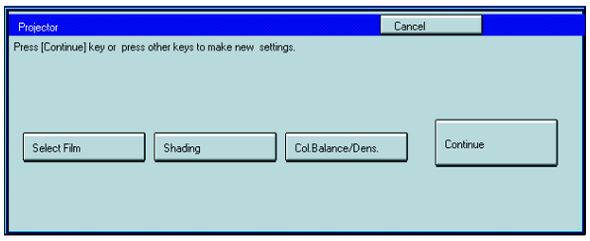
1: Focusing lever

Selecting Modes

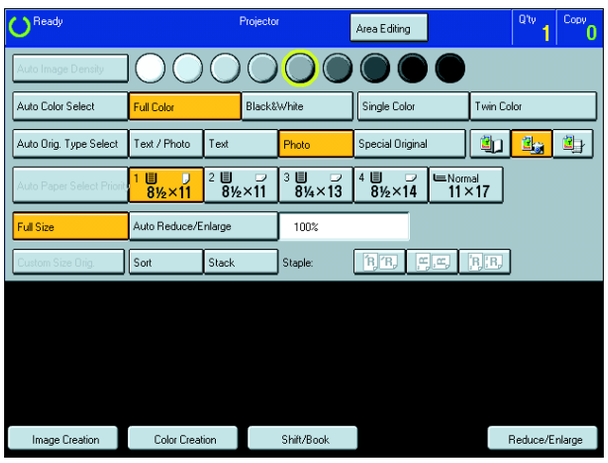
You can select copier modes with the projector.

❒ Regarding the modes that cannot be selected with the projector, ☞ see page 106.

1 After shading, press the **[Copy Mode Setting]** key.



2 Select the modes.



Note

❒ This operation is the same as that described in the “Copying” chapter.

3 Press the **[Start]** key.

Choosing Next Job

After copying, you can select the next job:

[Select Film]

You can change the type of film.

[Shading]

If the mirror unit is moved, or if some lines appear on the copy, you can perform shading again.

[Col. Balance/Dens.]

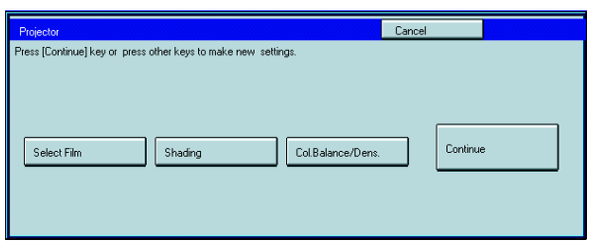
You can adjust the color tone, image density, or adjust the focus manually.

[Continue]

You can copy the same film again, or you can copy another film which is of the same type.

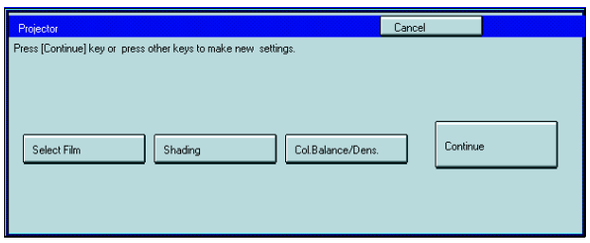
1. Press the **[Special Accessory]** key.

2. Select your next job.



Exiting Projector Mode

1 Press the **[Cancel]** key.

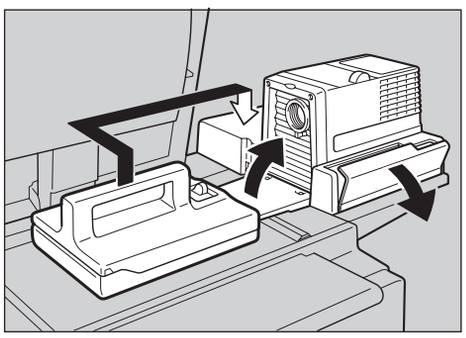


2 Replace the mirror unit to its original position.

Note

❒ Be careful not to touch the fresnel lens. If you do touch it, clean it. ☛ See page 236.

3 Return the holders, filters, and other accessories to the accessory box.


TRSR0R0E

4 Close the lens cover.

5 Turn off the power switch.

Note

❒ Though the power switch is turned off, the cooling fan may be still working. Therefore, please wait a few moments before unplugging the power cord.

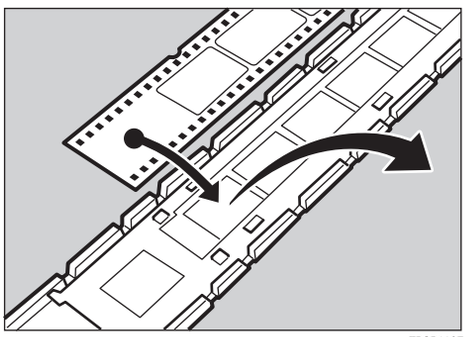
What to do if Something Goes Wrong

1. If the color balance is not right

❒ If the color density leans to red or blue, or isn't properly balanced, perform the color density adjustment, and the color balance adjustments for Yellow, Magenta, and Cyan. ☛ See page 124.

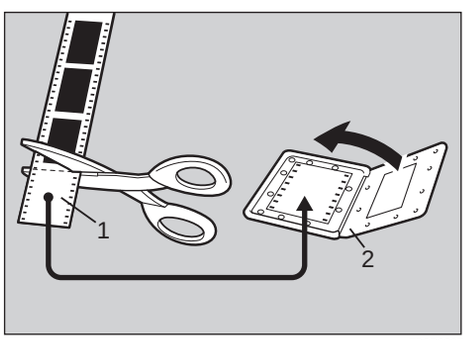
2. If the film you want to copy does not match the types of base film included.

❒ If you do not plan on copying from this type of film often, use an unexposed frame of the same film strip, if available, when performing shading.



TRSR1A0E

❒ If you plan on copying from this type of film often, make a base slide using an unexposed, developed frame of the film.



TRSR0S0E

1: Unexposed part
2: Mount

❒ If you have no blank unexposed frame of the same type of film, you can use an unexposed frame from film produced by the same company, but the colors might differ a bit.

3. If the copy image is out of focus.

❒ Check if the image on the film is focused or not. If it is, make sure the film is correctly set in the holder.

❒ If you reset the film correctly in the holder and the image is still out of focus, or if you use a different image, and the copy image is out of focus in every case, please call your service representative.

❒ You can adjust the focus manually with the focusing lever. ☛ See page 228.

4. If the edge of the original image does not appear on the copy.

❒ Check the size of the area that can be copied. ☛ See page 212.

❒ When setting film in the holder, be sure to position the desired frame properly.

❒ To extend the area that can be copied, use the glass mount film holder and focus manually.

5. If the projection lamp does not light.

❒ If the projection lamp does not light and a service message appears on the screen, the lamp might be burned out. In this case, please call you service representative.

6. If you move the mirror unit.

❒ Perform the shading operation once again.

7. If lines appear on the copy.

❒ Perform the shading operation again.

❒ Some possible causes are:

1. A long time has passed since shading.
2. Many copies were made since shading and the mirror unit has moved due to copier operation.
3. Someone might have leaned on the machine or put something on it.

❒ If copying from negative film, thin black lines might-appear on the lighter part of the copy, even after shading.

8. Black lines appear on the edge.

❒ These lines are shadows caused by the film holder and cannot be eliminated.

9. If a ring pattern appears on the copy.

❒ The ring pattern is present on the film itself, and the machine is sensitive enough to pick it up. Try to change the film setting direction. Adjusting the focusing lever so that the image is slightly out of focus will eliminate most of the pattern.

❒ Also, try the following:

- Open and close the film cover.
- Slide the film in the holder a bit.
- Turn the film around in the holder. (Do not flip it over.)

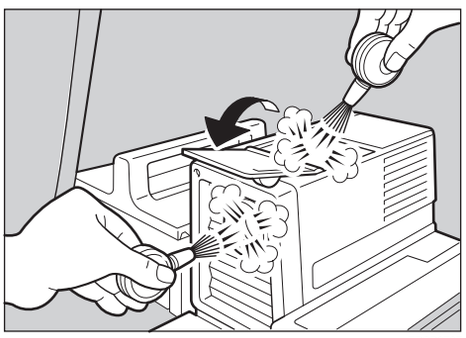
Daily Maintenance

Exterior

Wipe with a dry soft cloth.

Lens

Blow off any dust using the blower brush. If there are fingerprints on the lens, wipe them with a soft cloth.



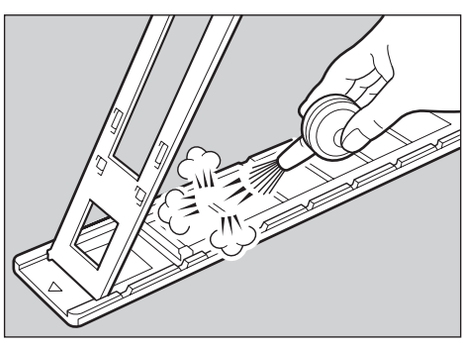
TRSR0T0E

Film Holder

Blow off any dust using the blower brush. If there are fingerprints on the glass, wipe with a soft cloth.

Holder Slot

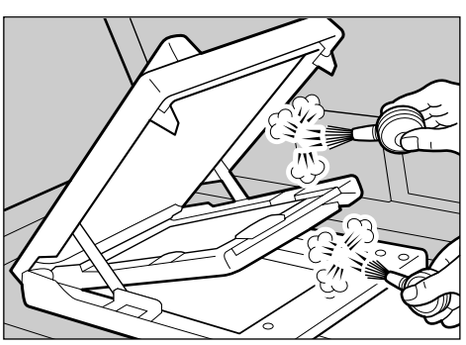
Blow off any dust using the blower brush.



TRSR0U0E

Mirror Unit

Blow off any dust using the blower brush. If there are fingerprints on the glass, wipe with a soft cloth.



TRSR0V0E

Specification

Mainframe

Configuration: Console

Process: Dry electrostatic transfer system

Resolution: 600 dpi

Gradations: 256 gradations

Originals: Sheet, book, objects

Original size: Maximum: A3, 11" × 17"

Copy paper size:
Trays 1 : ▭: A4, B5, 8 1/2" × 11"
▯: A4, B5, A5, 8 1/2" × 11", 8 1/2" × 5 1/2"
Tray 2 and 3: ▭: A3, B4, A4, B5, 11" × 17", 11" × 15", 10" × 14", 8 1/2" × 14", 8 1/2" × 13", 8 1/2" × 11", 8 1/4" × 13", 8" × 13", 8" × 10 1/2", 8" × 10"
▯: A4, B5, A5, 8 1/2" × 11", 8 1/2" × 5 1/2"
Bypass Tray: See page 48.

Copy paper weight:
Paper tray: 64 ~ 105g/m², 17 ~ 28 lb
Bypass tray: 64 ~ 256g/m², 17 ~ 68 lb (If you use paper specified by your supplier, the maximum weight is 200g/m². However, there are some limitations. For details, contact your sales or service representative.)
Auto Duplex Tray: 64 ~ 105g/m², 17 - 28 lb
(When you use paper heavier than 105g/m², 28 lb, use the bypass feed table and select Thick Paper mode.)

Copy paper capacity: Three 500-sheet trays (Trays 1, 2, and 3)
Bypass Tray (50 sheets)

Copying speed (Full size):

Full color (4 colors)

	Standard mode	OHP/Thick mode
(A4▯, 8 1/2" × 11"▯)	10 copies/minute	5 copies/minute
(A3▭, 11" × 17"▭)	5 copies/minute	2 copies/minute

Black, Yellow, Magenta, Cyan:

	Standard mode	OHP/Thick mode
(A4▯, 8 1/2" × 11"▯)	40 copies/minute	7 copies/minute
(A3▭, 11" × 17"▭)	20 copies/minute	4 copies/minute

Blue (Magenta + Cyan), Green (Yellow +Cyan):

	Standard mode	OHP/Thick mode
(A4▯, 8 1/2" × 11"▯)	14 copies/minute	5 copies/minute
(A3▭, 11" × 17"▭)	7 copies/minute	3 copies/minute

Red (Yellow + Magenta):

	Standard mode	OHP/Thick mode
(A4▯, 8 1/2" × 11"▯)	10 copies/minute	5 copies/minute
(A3▭, 11" × 17"▭)	5 copies/minute	2 copies/minute

Black + Yellow, Black + Magenta, Black + Cyan:

	Standard mode	OHP/Thick mode
(A4▯, 8 1/2" × 11"▯)	10 copies/minute	5 copies/minute
(A3▭, 11" × 17"▭)	5 copies/minute	2 copies/minute

First copy time:

	Standard mode	OHP/Thick mode
Full colors (4 colors)	16.5 seconds or less	29 seconds or less
Black, Yellow, Magenta, Cyan	8 seconds or less	19 seconds or less
Blue (Magenta + Cyan) Green (Yellow + Cyan)	14 seconds or less	26.5 seconds or less
Red (Yellow + Magenta)	16.5 seconds or less	29 seconds or less
Black + Yellow Black + Magenta Black + Cyan	16.5 seconds or less	29 seconds or less

Non-reproduction area: Leading edge: 4±2mm, 0.16" ±0.08"
Trailing edge: 2±2mm, 0.08" ±0.08"
Side: 2±2mm, 0.08" ±0.08" (Total less than 4mm, 0.16")

Toner replenishment: Cartridge (340g/cartridge)

Warm-up time: About 9 minutes (20°C, 68°F)

Reproduction ratios: 5 enlargement and 7 reduction

	Metric version	Inch version
Enlargement	400%	400%
	200%	200%
	141%	155%
	122%	129%
	115%	121%
Full size	100%	100%
Reduction	93%	93%
	82%	85%
	75%	77%
	71%	74%
	65%	65%
	50%	50%
	25%	25%

Power consumption:

	Copier only	Full system*
Warm up	1.7kW	1.7kW
Stand-by	0.6kW	0.6kW
Copying	1.50kW	1.50kW
Maximum	less than 1.75kW	less than 1.75kW

* Full system: Copier with the document feeder, 20-bin stapler sorter and large capacity tray.

Noise Emission (ISO7779 Sound Power Level):

Based on actual measurement

	Mainframe only	Complete System
When printing	less than 70 dB (A)	less than 74 dB (A)
Stand-by	less than 54 dB (A)	– dB (A)

Dimensions (W × D × H up to the exposure glass):

730 × 770 × 980mm, 28.8" × 30.4" × 38.6"

Weight: Approx. 240kg, 529.2 lb

❒ Specifications are subject to change without notice.

Document Feeder (Option)

Original Feed:	Automatic reverse document feed - ARDF mode
	Automatic document feed - ADF mode
	Semi-automatic document feed - SADF mode
Original size:	A3□ - B6□□ (B6□□ cannot be used in ARDF mode)
	11" × 17"□ - 5 1/2" × 8 1/2"□□
Original weight:	SADF mode, ADF mode: 52 - 128g/m², 14 - 34 lb
	ARDF mode: 52 - 105g/m², 14 - 28 lb
	(For 40 - 52g/m², 11 - 14 lb originals, use ADF Thin Paper mode. B6□ cannot be used in ARDF Thin Paper mode)
Maximum number of originals to be set:	50 sheets (80g/m², 20 lb)
Original set:	Face up, First sheet on top
Original transport:	One flat belt
Maximum power consumption:	45W (Power is supplied from the main frame.)
Weight:	Less than 10.5kg, 23.2 lb
Dimensions : (W × D × H)	610 × 507 × 130mm, 24.1" × 20.0" × 5.2"

❒ Specifications are subject to change without notice.

20-bin Sorter Stapler (Option)

Number of bins: 20 bins + proof tray

Paper size for bins (Normal paper mode):

Proof tray:

A3□, B4□, A4▯□, B5▯□, A5▯□, 13" × 19"□, 12" × 18"□, 11" × 17"□, 11" × 15"□, 10" × 14"□, 8 1/2" × 14"□, 8 1/2" × 13"□, 8 1/2" × 11"▯□, 8 1/2" × 5 1/2"▯, 8 1/4" × 13"□, 8" × 13"□, 8" × 10 1/2"□, 8" × 10"□

Sort/Stack:

A3□, B4□, A4▯□, B5▯□, 11" × 17"□, 11" × 15□", 10" × 14"□, 8" × 10"□, 8" × 10 1/2□", 8 1/2" × 14"□, 8 1/2" × 13"□, 8 1/4" × 13"□, 8" × 13"□, 8 1/2" × 11"▯□, 12" × 18"□, 13" × 19"□

Staple:

A3□, B4□, A4▯□, B5▯□, 11" × 17"□, 11" × 15"□, 10" × 14"□, 8 1/2" × 14"□, 8 1/2" × 13"□, 8 1/4" × 13"□, 8" × 10"□, 8" × 10 1/2"□, 8" × 13"□, 8 1/2" × 11"▯□, 12" × 18"□, 13" × 19"□

Paper weight for bins:

Proof tray: 64g/m² - 105g/m², 17 - 28 lb

Sort/Stack: 64g/m² - 256g/m², 17 - 68 lb

Staple: 64g/m² - 256g/m², 17 - 68 lb

Bin capacity (Normal paper mode):

Sort: 50 sheets (80g/m², 20 lb)

Stack: 50 sheets (80g/m², 20 lb)

Stapler capacity (Normal paper mode): 2-50 sheets (80g/m², 20 lb)

Proof tray capacity: 250 sheets/A4 or smaller (80g/m², 20 lb)

200 sheets/B4 or larger (80g/m², 20 lb)

Maximum power consumption: 60W (Power is supplied from the main frame.)

Weight: 65kg, 143.3 lb

Dimensions (W × D × H): 600 × 615 × 980mm, 23.7" × 24.3" × 38.6"

❒ Specifications are subject to change without notice.

Large Capacity Tray (LCT) (Option)

Paper size:	A4 ▯, 8 1/2" × 11" ▯
Paper weight:	64 - 105g/m², 20 - 28 lb
Paper capacity:	1,500 sheets (80g/m², 20 lb)
Power consumption:	Approx. 40W (power is supplied from the main frame.)
Dimensions (W × D × H):	390 × 500 × 390mm, 15.4" × 19.7" × 15.4"
Weight:	Approx. 17kg, 37.5 lb

Projector Unit (Option)

Acceptable film types:	Type:	Positive film, Negative film
	Size:	35mm
	Others:	60 × 45mm, 60 × 60mm, 60 × 70mm, 60 × 80mm, 60 × 90mm, 4" × 5"
	Max:	142 × 210mm, 5.5" × 8.2"
	Mount:	Yes (Up to 5 frames can be set in a film holder.)
	Strip:	Yes (A series of 6 frames can be set in a film holder.)
Focusing:	Fixed/Manual	
Maximum Power consumption:	70W	
Weight:	Projector:	7.9kg, 17.5 lb
	Mirror unit:	2.7kg, 6.0 lb
Dimensions (W × D × H):	Projector:	300 × 442 × 212mm, 11.9" × 17.5" X× 8.4"
	Mirror unit:	298 × 232 × 50mm, 11.8" × 9.2" × 2.0"
Remarks:	The holder is required for installation.	

❒ Specifications are subject to change without notice.

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Note to users in the United States of America

Notice:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be detemined by turning the equipment off and on, the user is encouraged to try to correct the interference by one more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

Warning:

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note to users in Canada

Note:

This Class B digital apparatus complies with Canadian ICES-003.

Remarque concernant les utillisateurs an Canada

Avertissement:

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

In accordance with IEC Standard 417, this machine uses the following symbols for the main power switch:

| means POWER ON.

⏻ means STAND BY.

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